

## Cover Page

**Order ID :** Q1232

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

**Client :** RU2 Engineering, LLC

### Lab Sample Number

Q1232-01  
Q1232-02  
Q1232-03  
Q1232-04  
Q1232-05  
Q1232-06  
Q1232-07  
Q1232-08  
Q1232-09  
Q1232-10  
Q1232-11  
Q1232-12  
Q1232-13  
Q1232-14  
Q1232-15  
Q1232-16  
Q1232-17  
Q1232-18  
Q1232-19  
Q1232-20

### Client Sample Number

JPP-46.2-012925  
JPP-46.2-012925  
JPP-46.2-012925  
JPP-46.2-012925  
JPP-46.1-012925  
JPP-46.1-012925  
JPP-46.1-012925  
JPP-46.1-012925  
JPP-42.1-012925  
JPP-42.1-012925  
JPP-42.1-012925  
JPP-42.1-012925  
JPP-42.2-012925  
JPP-42.2-012925  
JPP-42.2-012925  
JPP-51.1-012925  
JPP-51.1-012925  
JPP-51.1-012925  
JPP-51.1-012925

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: 2/7/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012



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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 # Q1232**

**Test Name: Diesel Range Organics**

**A. Number of Samples and Date of Receipt:**

20 Solid samples were received on 01/30/2025.

**B. Parameters**

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

**C. Analytical Techniques:**

The analysis were performed on instrument FID\_E. The column is RXI-1MS which is 20 meters, 0.18mm ID, 0.18 um df, catalog 10224. The analysis 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 {Q1241-05MS} with File ID: FE052181.D recoveries met the requirements for all compounds except for DRO[-241.5%] Due to matrix interference.

The MSD {Q1241-05MSD} with File ID: FE052182.D recoveries met the acceptable requirements except for DRO[-214.5%] 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 .



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Samples JPP-46.2-012925, JPP-46.1-012925, JPP-42.1-012925, JPP-42.2-012925 and JPP-51.1-012925 were diluted due to bad matrices, The above sample original run is reported as screening data in miscellaneous data.

**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.

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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\_\_\_\_\_

**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
<b>U</b>	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.
<b>ND</b>	Indicates the analyte was analyzed for, but not detected
<b>J</b>	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 flag is used when similar situation arise on any organic parameter i.e. Pest, PCB and others.
<b>B</b>	Indicates the analyte was found in the blank as well as the sample report as "12 B".
<b>E</b>	Indicates the analyte 's concentration exceeds the calibrated range of the instrument for that specific analysis.
<b>D</b>	This flag identifies all compounds identified in an analysis at a secondary dilution factor.
<b>P</b>	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".
<b>N</b>	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.
<b>A</b>	This flag indicates that a Tentatively Identified Compound is a suspected aldol-condensation product.
<b>Q</b>	Indicates the LCS did not meet the control limits requirements



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**GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY**

CHEMTECH PROJECT NUMBER: Q1232

MATRIX: Solid

METHOD: 8015D/3541

	NA	NO	YES
1. Chromatograms Labeled/Compounds Identified.			✓
2. Standard Summary Submitted.			✓
3. Calibration - Initial Calibration performed within 30 days before sample analysis and continuing calibration performed within 24 hours of sample analysis, 12 HOURS IF 8000 SERIES METHOD.			✓
	The Initial Calibration met the requirements .		
	The Continuous Calibration met the requirements .		
4. Blank Contamination - If yes, list compounds and concentrations in each blank:			✓
5. Surrogate Recoveries Meet Criteria			✓
	If not met, list those compounds and their recoveries which fall outside the acceptable ranges.		
6. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria			✓
	If not met, list those compounds and their recoveries which fall outside the acceptable range.		
	The MS {Q1241-05MS} with File ID: FE052181.D recoveries met the requirements for all compounds except for DRO[-241.5%] Due to matrix interference.		
	The MSD {Q1241-05MSD} with File ID: FE052182.D recoveries met the acceptable requirements except for DRO[-214.5%] 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.		



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**GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY (CONTINUED)**

NA      NO      YES

**ADDITIONAL COMMENTS:**

Samples JPP-46.2-012925, JPP-46.1-012925, JPP-42.1-012925, JPP-42.2-012925 and JPP-51.1-012925 were diluted due to bad matrices, The above sample original run is reported as screening data in miscellaneous data.

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

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QA REVIEW

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Date

## APPENDIX A

### QA REVIEW GENERAL DOCUMENTATION

Project #: Q1232

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 ✓

## LAB CHRONICLE

<b>OrderID:</b>	Q1232	<b>OrderDate:</b>	1/30/2025 11:55:00 AM					
<b>Client:</b>	RU2 Engineering, LLC	<b>Project:</b>	NYCDDC SANTWOBR Brooklyn Bridge BBMCR					
<b>Contact:</b>	Rutu Manani	<b>Location:</b>	E11,VOA Ref. #2 Soil					
<hr/>								
LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1232-01	JPP-46.2-012925	SOIL	Diesel Range Organics Gasoline Range Organics	8015D 8015D	<b>01/29/25</b>	01/31/25 01/31/25	01/31/25 01/31/25	<b>01/30/25</b>
Q1232-03	JPP-46.2-012925	SOIL	Pesticide-TCL	8081B	<b>01/29/25</b>	01/31/25	01/31/25	<b>01/30/25</b>
Q1232-04	JPP-46.2-012925	TCLP	TCLP Pesticide	8081B	<b>01/29/25</b>	01/31/25	02/03/25	<b>01/30/25</b>
Q1232-05	JPP-46.1-012925	SOIL	Diesel Range Organics Gasoline Range Organics	8015D 8015D	<b>01/29/25</b>	01/31/25 02/03/25	01/31/25 02/03/25	<b>01/30/25</b>
Q1232-07	JPP-46.1-012925	SOIL	Pesticide-TCL	8081B	<b>01/29/25</b>	01/31/25	01/31/25	<b>01/30/25</b>
Q1232-08	JPP-46.1-012925	TCLP	TCLP Pesticide	8081B	<b>01/29/25</b>	01/31/25	02/03/25	<b>01/30/25</b>
Q1232-09	JPP-42.1-012925	SOIL	Diesel Range Organics Gasoline Range Organics	8015D 8015D	<b>01/29/25</b>	01/31/25 02/03/25	01/31/25 02/03/25	<b>01/30/25</b>
Q1232-11	JPP-42.1-012925	SOIL	Pesticide-TCL	8081B	<b>01/29/25</b>	01/31/25	01/31/25	<b>01/30/25</b>
Q1232-12	JPP-42.1-012925	TCLP	TCLP Pesticide	8081B	<b>01/29/25</b>	01/31/25	02/03/25	<b>01/30/25</b>
Q1232-13	JPP-42.2-012925	SOIL	Diesel Range Organics Gasoline Range Organics	8015D 8015D	<b>01/29/25</b>	01/31/25 02/03/25	01/31/25 02/03/25	<b>01/30/25</b>

## LAB CHRONICLE

<b>Q1232-15</b>	<b>JPP-42.2-012925</b>	<b>SOIL</b>	Pesticide-TCL	8081B	<b>01/29/25</b>	01/31/25	01/31/25	<b>01/30/25</b>
<b>Q1232-16</b>	<b>JPP-42.2-012925</b>	<b>TCLP</b>	TCLP Pesticide	8081B	<b>01/29/25</b>	01/31/25	02/03/25	<b>01/30/25</b>
<b>Q1232-17</b>	<b>JPP-51.1-012925</b>	<b>SOIL</b>	Diesel Range Organics Gasoline Range Organics	8015D 8015D	<b>01/29/25</b>	01/31/25 02/03/25	01/31/25	<b>01/30/25</b>
<b>Q1232-19</b>	<b>JPP-51.1-012925</b>	<b>SOIL</b>	Pesticide-TCL	8081B	<b>01/29/25</b>	01/31/25	01/31/25	<b>01/30/25</b>
<b>Q1232-20</b>	<b>JPP-51.1-012925</b>	<b>TCLP</b>	TCLP Pesticide	8081B	<b>01/29/25</b>	01/31/25	02/03/25	<b>01/30/25</b>



QC

SUMMARY



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### SOIL DIESEL RANGE ORGANICS SURROGATE RECOVERY

Lab Name: Chemtech Client: RU2 Engineering, LLC  
Lab Code: CHEM Case No.: Q1232 SAS No.: Q1232 SDG No.: Q1232

EPA SAMPLE NO.	S1 TETRACOSANE-d50	S2	S3	S4	TOT OUT
PIBLK-FE052167.D	90				0
PIBLK-FE052179.D	82				0
PIBLK-FE052189.D	87				0
PIBLK-FG015282.D	83				0
PIBLK-FG015291.D	80				0
PB166415BL	87				0
PB166415BS	94				0
JPP-46.2-012925	116				0
JPP-46.1-012925	56				0
JPP-42.1-012925	69				0
JPP-42.2-012925	92				0
JPP-51.1-012925	95				0
JPP-5.3-013025MS	64				0
JPP-5.3-013025MSD	62				0

#### QC LIMITS

TETRACOSANE-d50

For Water : 29-130

For Soil : 37-130

# Column to be used to flag recovery values

\* Values outside of contract required QC limits

D Surrogate Diluted Out



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**SOIL DIESEL RANGE ORGANICS MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY**

**Lab Name:** Chemtech      **Client:** RU2 Engineering, LLC  
**Lab Code:** CHEM      **Cas No:** Q1232      **SAS No :** Q1232      **SDG No:** Q1232  
**Client SampleID :** JPP-5.3-013025MS      **Datafile:** FE052181.D

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



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**SOIL DIESEL RANGE ORGANICS MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY**

**Lab Name:** Chemtech      **Client:** RU2 Engineering, LLC  
**Lab Code:** CHEM      **Cas No:** Q1232      **SAS No :** Q1232      **SDG No:** Q1232  
**Client SampleID :** JPP-5.3-013025MSD      **Datafile:** FE052182.D

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

**MS/MSD % Recovery RPD** : 12.28



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**SOIL DIESEL RANGE ORGANICS LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE REPORT**

**Lab Name:** Chemtech      **Client:** RU2 Engineering, LLC  
**Lab Code:** CHEM      **Cas No:** Q1232      **SAS No :** Q1232      **SDG No:** Q1232  
**Matrix Spike - EPA Sample No :** PB166415BS      **Datafile:** FE052172.D

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

4B  
METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB166415BL

Lab Name: CHEMTECH

Contract: RUTW01

Lab Code: CHEM

Case No.: Q1232

SAS No.: Q1232 SDG NO.: Q1232

Lab File ID: FE052171.D

Lab Sample ID: PB166415BL

Instrument ID: FE

Date Extracted: 01/31/2025

Matrix: (soil/water) Soil

Date Analyzed: 01/31/25

Level: (low/med) low

Time Analyzed: 12:08

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB166415BS	PB166415BS	FE052172.D	01/31/25
JPP-5.3-013025MS	Q1241-05MS	FE052181.D	01/31/25
JPP-5.3-013025MSD	Q1241-05MSD	FE052182.D	01/31/25
JPP-46.2-012925	Q1232-01	FG015284.D	01/31/25
JPP-46.1-012925	Q1232-05	FG015285.D	01/31/25
JPP-42.1-012925	Q1232-09	FG015286.D	01/31/25
JPP-42.2-012925	Q1232-13	FG015287.D	01/31/25
JPP-51.1-012925	Q1232-17	FG015288.D	01/31/25

COMMENTS:

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# SAMPLE

# DATA

## Report of Analysis

Client:	RU2 Engineering, LLC			Date Collected:	01/29/25	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR			Date Received:	01/30/25	
Client Sample ID:	JPP-46.2-012925			SDG No.:	Q1232	
Lab Sample ID:	Q1232-01			Matrix:	SOIL	
Analytical Method:	8015D DRO			% Solid:	89.7	Decanted:
Sample Wt/Vol:	30.07	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
FG015284.D	10	01/31/25 08:50	01/31/25 18:11	PB166415

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
<b>TARGETS</b>						
DRO	DRO	147000		2060		18500 ug/kg
<b>SURROGATES</b>						
16416-32-3	Tetracosane-d50	2.33		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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG013125\  
Data File : FG015284.D  
Signal(s) : FID1A.ch  
Acq On : 31 Jan 2025 18:11  
Operator : YP\AJ  
Sample : Q1232-01 10X  
Misc :  
ALS Vial : 21 Sample Multiplier: 1

Instrument :  
FID\_G  
ClientSampleId :  
JPP-46.2-012925

Integration File: autoint1.e  
Quant Time: Feb 01 01:16:53 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 : Rx1-1ms  
Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

9) S TETRACOSANE-d50 (SURR...	15.063	298549	2.327 ug/ml
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Target Compounds

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(f)=RT Delta > 1/2 Window

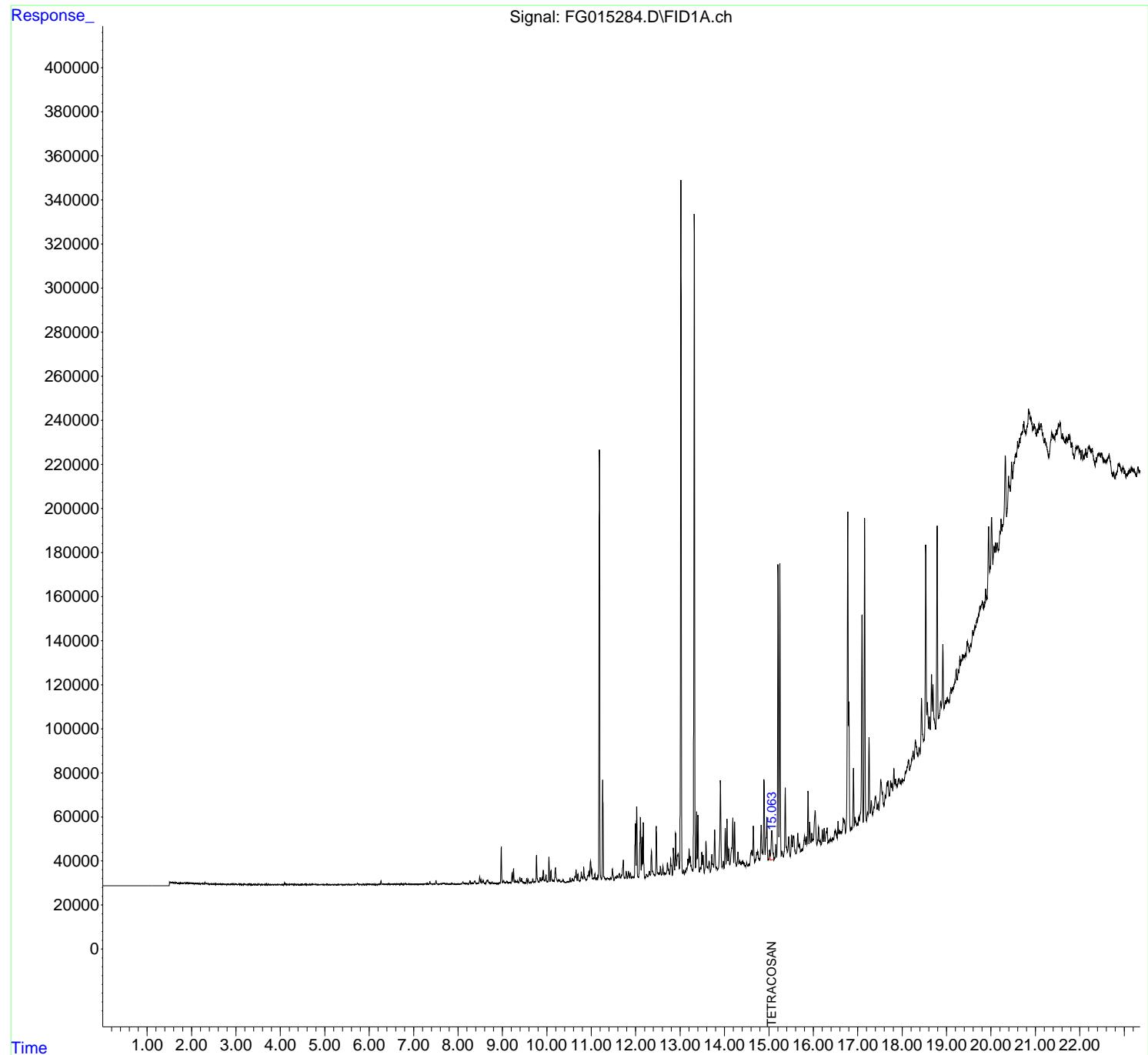
(m)=manual int.

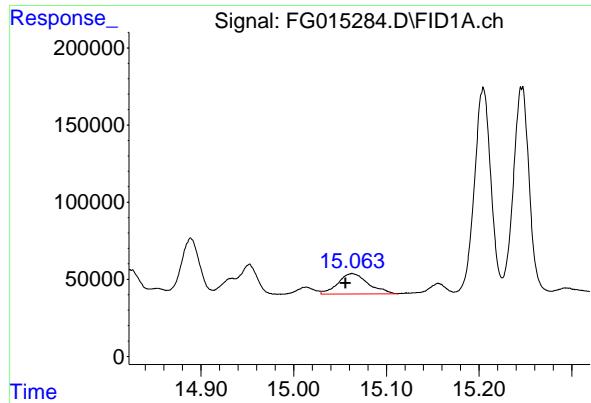
Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG013125\  
Data File : FG015284.D  
Signal(s) : FID1A.ch  
Acq On : 31 Jan 2025 18:11  
Operator : YP\AJ  
Sample : Q1232-01 10X  
Misc :  
ALS Vial : 21 Sample Multiplier: 1

Instrument :  
FID\_G  
ClientSampleId :  
JPP-46.2-012925

Integration File: autoint1.e  
Quant Time: Feb 01 01:16:53 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 : Rx1-1ms  
Signal Info : 20mx0.18mmx0.18um





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 15.063 min  
Delta R.T.: 0.007 min  
Instrument:  
Response: 298549  
Conc: 2.33 ug/ml  
ClientSampleId : JPP-46.2-012925

## rteres

## Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG013125\  
 Data File : FG015284.D  
 Signal(s) : FID1A.ch  
 Acq On : 31 Jan 2025 18:11  
 Sample : Q1232-01 10X  
 Misc :  
 ALS Vial : 21 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	4.370	4.350	4.374	BH	79	355	0.01%	0.001%
2	4.380	4.374	4.388	HH	69	271	0.01%	0.000%
3	4.394	4.388	4.406	PH	57	265	0.01%	0.000%
4	4.409	4.406	4.427	PH	68	244	0.01%	0.000%
5	4.431	4.427	4.439	PH	26	25	0.00%	0.000%
6	4.477	4.439	4.484	PH	107	665	0.02%	0.001%
7	4.492	4.484	4.526	HH	108	545	0.01%	0.001%
8	4.547	4.526	4.558	PH	265	2263	0.06%	0.004%
9	4.564	4.558	4.575	HH	115	699	0.02%	0.001%
10	4.581	4.575	4.605	HH	139	899	0.02%	0.002%
11	4.608	4.605	4.617	PH	58	165	0.00%	0.000%
12	4.623	4.617	4.635	PH	83	344	0.01%	0.001%
13	4.637	4.635	4.651	PH	102	251	0.01%	0.000%
14	4.670	4.651	4.689	PH	105	682	0.02%	0.001%
15	4.713	4.689	4.748	PH	222	2267	0.06%	0.004%
16	4.751	4.748	4.758	PH	12	53	0.00%	0.000%
17	4.780	4.758	4.806	PH	159	1362	0.04%	0.002%
18	4.811	4.806	4.817	PH	63	85	0.00%	0.000%
19	4.820	4.817	4.825	PH	46	30	0.00%	0.000%
20	4.836	4.825	4.847	PH	83	221	0.01%	0.000%
21	4.857	4.847	4.866	PH	61	93	0.00%	0.000%
22	4.871	4.866	4.880	PH	54	196	0.01%	0.000%
23	4.888	4.880	4.900	PH	59	339	0.01%	0.001%
24	4.905	4.900	4.911	PH	56	153	0.00%	0.000%
25	4.940	4.911	4.955	PH	136	1721	0.05%	0.003%
26	4.962	4.955	4.988	HH	123	976	0.03%	0.002%
27	4.994	4.988	5.036	PH	46	1496	0.04%	0.003%
28	5.065	5.036	5.081	PH	121	1623	0.04%	0.003%
29	5.087	5.081	5.099	PH	71	72	0.00%	0.000%
30	5.101	5.099	5.120	PH	114	188	0.00%	0.000%
31	5.122	5.120	5.127	PH	81	137	0.00%	0.000%
32	5.136	5.127	5.159	PH	90	457	0.01%	0.001%
33	5.163	5.159	5.172	PH	96	264	0.01%	0.000%
34	5.183	5.172	5.190	PH	69	227	0.01%	0.000%
35	5.205	5.190	5.214	PH	90	314	0.01%	0.001%
36	5.219	5.214	5.230	PH	42	-12	-0.00%	-0.000%

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37	5. 235	5. 230	5. 245	PH	35	-249	-0. 01%	-0. 000%
38	5. 250	5. 245	5. 282	PH	44	-174	-0. 00%	-0. 000%
39	5. 286	5. 282	5. 297	PH	3	-139	-0. 00%	-0. 000%
40	5. 308	5. 297	5. 319	PH	84	382	0. 01%	0. 001%
41	5. 323	5. 319	5. 333	PH	35	-178	-0. 00%	-0. 000%
42	5. 341	5. 333	5. 349	PH	66	-23	-0. 00%	-0. 000%
43	5. 367	5. 349	5. 387	PH	142	1081	0. 03%	0. 002%
44	5. 396	5. 387	5. 416	PH	44	-280	-0. 01%	-0. 000%
45	5. 426	5. 416	5. 433	PH	31	-184	-0. 00%	-0. 000%
46	5. 440	5. 433	5. 446	PH	57	2	0. 00%	0. 000%
47	5. 450	5. 446	5. 476	PH	20	-218	-0. 01%	-0. 000%
48	5. 495	5. 476	5. 515	PH	189	2156	0. 06%	0. 004%
49	5. 518	5. 515	5. 525	HH	90	245	0. 01%	0. 000%
50	5. 527	5. 525	5. 536	HH	102	213	0. 01%	0. 000%
51	5. 540	5. 536	5. 559	PH	60	128	0. 00%	0. 000%
52	5. 571	5. 559	5. 618	PH	90	345	0. 01%	0. 001%
53	5. 623	5. 618	5. 640	PH	30	153	0. 00%	0. 000%
54	5. 648	5. 640	5. 677	PH	43	-184	-0. 00%	-0. 000%
55	5. 692	5. 677	5. 710	PH	170	1583	0. 04%	0. 003%
56	5. 733	5. 710	5. 792	HH	611	8667	0. 23%	0. 015%
57	5. 797	5. 792	5. 812	PH	92	579	0. 02%	0. 001%
58	5. 816	5. 812	5. 840	HH	67	590	0. 02%	0. 001%
59	5. 856	5. 840	5. 867	PH	119	695	0. 02%	0. 001%
60	5. 873	5. 867	5. 891	HH	122	1208	0. 03%	0. 002%
61	5. 898	5. 891	5. 907	HH	68	411	0. 01%	0. 001%
62	5. 925	5. 907	5. 949	PH	141	1306	0. 03%	0. 002%
63	5. 961	5. 949	5. 971	HH	153	1312	0. 03%	0. 002%
64	5. 986	5. 971	5. 996	HH	158	1772	0. 05%	0. 003%
65	6. 000	5. 996	6. 004	HH	104	465	0. 01%	0. 001%
66	6. 011	6. 004	6. 039	HH	118	1660	0. 04%	0. 003%
67	6. 066	6. 039	6. 091	HH	150	2086	0. 06%	0. 004%
68	6. 103	6. 091	6. 117	PH	92	483	0. 01%	0. 001%
69	6. 122	6. 117	6. 137	HH	79	348	0. 01%	0. 001%
70	6. 166	6. 137	6. 172	HH	125	1254	0. 03%	0. 002%
71	6. 175	6. 172	6. 201	HH	124	1168	0. 03%	0. 002%
72	6. 226	6. 201	6. 248	HH	206	2874	0. 08%	0. 005%
73	6. 266	6. 248	6. 296	HH	1770	19452	0. 51%	0. 035%
74	6. 313	6. 296	6. 341	HH	254	4957	0. 13%	0. 009%
75	6. 346	6. 341	6. 350	HH	104	434	0. 01%	0. 001%
76	6. 370	6. 350	6. 379	HH	163	2059	0. 05%	0. 004%
77	6. 384	6. 379	6. 399	HH	127	1403	0. 04%	0. 003%
78	6. 436	6. 399	6. 474	HH	319	8438	0. 22%	0. 015%
79	6. 477	6. 474	6. 485	HH	105	586	0. 02%	0. 001%
80	6. 498	6. 485	6. 504	HH	196	1600	0. 04%	0. 003%
81	6. 510	6. 504	6. 515	HH	178	1119	0. 03%	0. 002%
82	6. 521	6. 515	6. 547	HH	241	3555	0. 09%	0. 006%
83	6. 568	6. 547	6. 589	HH	309	6131	0. 16%	0. 011%
84	6. 599	6. 589	6. 607	HH	247	2094	0. 06%	0. 004%
85	6. 613	6. 607	6. 617	HH	181	1088	0. 03%	0. 002%
86	6. 622	6. 617	6. 626	HH	251	998	0. 03%	0. 002%
87	6. 653	6. 626	6. 688	HH	325	8371	0. 22%	0. 015%
88	6. 728	6. 688	6. 777	HH	530	12241	0. 32%	0. 022%
89	6. 786	6. 777	6. 791	HH	201	1209	0. 03%	0. 002%

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90	6. 813	6. 791	6. 836	HH	414	7000	0. 19%	0. 012%	
91	6. 841	6. 836	6. 866	HH	273	3538	0. 09%	0. 006%	
92	6. 885	6. 866	6. 909	HH	224	3996	0. 11%	0. 007%	
93	6. 912	6. 909	6. 918	HH	160	792	0. 02%	0. 001%	
94	6. 927	6. 918	6. 934	HH	217	1651	0. 04%	0. 003%	
95	6. 936	6. 934	6. 953	HH	236	1793	0. 05%	0. 003%	
96	6. 960	6. 953	6. 986	HH	168	2559	0. 07%	0. 005%	
97	6. 993	6. 986	6. 998	HH	164	1014	0. 03%	0. 002%	
98	7. 016	6. 998	7. 034	HH	291	4322	0. 11%	0. 008%	
99	7. 054	7. 034	7. 115	HH	297	7858	0. 21%	0. 014%	
100	7. 136	7. 115	7. 169	HH	315	6452	0. 17%	0. 012%	
101	7. 179	7. 169	7. 184	HH	227	1613	0. 04%	0. 003%	
102	7. 218	7. 184	7. 224	HH	257	4782	0. 13%	0. 009%	
103	7. 231	7. 224	7. 236	HH	333	1935	0. 05%	0. 003%	
104	7. 251	7. 236	7. 257	HH	363	3565	0. 09%	0. 006%	
105	7. 265	7. 257	7. 272	HH	394	3115	0. 08%	0. 006%	
106	7. 277	7. 272	7. 287	HH	362	2637	0. 07%	0. 005%	
107	7. 308	7. 287	7. 335	HH	459	8557	0. 23%	0. 015%	
108	7. 368	7. 335	7. 392	HH	1440	21026	0. 56%	0. 037%	
109	7. 410	7. 392	7. 438	HH	418	8769	0. 23%	0. 016%	
110	7. 455	7. 438	7. 484	HH	498	9361	0. 25%	0. 017%	
111	7. 506	7. 484	7. 537	HH	1843	24661	0. 65%	0. 044%	
112	7. 549	7. 537	7. 569	HH	365	5728	0. 15%	0. 010%	
113	7. 575	7. 569	7. 599	HH	279	5041	0. 13%	0. 009%	
114	7. 619	7. 599	7. 623	HH	348	4559	0. 12%	0. 008%	
115	7. 661	7. 623	7. 667	HH	550	11279	0. 30%	0. 020%	
116	7. 680	7. 667	7. 711	HH	823	13990	0. 37%	0. 025%	
117	7. 718	7. 711	7. 726	HH	416	3454	0. 09%	0. 006%	
118	7. 729	7. 726	7. 782	HH	378	11152	0. 29%	0. 020%	
119	7. 787	7. 782	7. 808	HH	329	4147	0. 11%	0. 007%	
120	7. 815	7. 808	7. 837	HH	351	4447	0. 12%	0. 008%	
121	7. 858	7. 837	7. 890	HH	454	10759	0. 28%	0. 019%	
122	7. 896	7. 890	7. 901	HH	325	1925	0. 05%	0. 003%	
123	7. 905	7. 901	7. 908	HH	329	1317	0. 03%	0. 002%	
124	7. 911	7. 908	7. 927	HH	336	3159	0. 08%	0. 006%	
125	7. 933	7. 927	7. 941	HH	246	1762	0. 05%	0. 003%	
126	7. 963	7. 941	7. 968	HH	267	3966	0. 10%	0. 007%	
127	7. 979	7. 968	7. 982	HH	308	2430	0. 06%	0. 004%	
128	8. 002	7. 982	8. 032	HH	341	8179	0. 22%	0. 015%	
129	8. 038	8. 032	8. 045	HH	297	1988	0. 05%	0. 004%	
130	8. 073	8. 045	8. 079	HH	381	6418	0. 17%	0. 011%	
131	8. 111	8. 079	8. 155	HH	1275	28329	0. 75%	0. 051%	
132	8. 164	8. 155	8. 197	HH	481	10471	0. 28%	0. 019%	
133	8. 211	8. 197	8. 240	HH	475	10713	0. 28%	0. 019%	
134	8. 270	8. 240	8. 306	HH	1677	32001	0. 85%	0. 057%	
135	8. 318	8. 306	8. 350	HH	809	15094	0. 40%	0. 027%	
136	8. 383	8. 350	8. 423	HH	1623	43399	1. 15%	0. 077%	
137	8. 490	8. 423	8. 505	HH	3666	61364	1. 62%	0. 109%	
138	8. 518	8. 505	8. 536	HH	2253	28792	0. 76%	0. 051%	
139	8. 566	8. 536	8. 622	HH	1707	51802	1. 37%	0. 092%	
140	8. 672	8. 622	8. 747	HH	1995	84289	2. 23%	0. 150%	
141	8. 767	8. 747	8. 802	HH	1282	26264	0. 69%	0. 047%	

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142	8. 815	8. 802	8. 834	HH	891	12999	0. 34%	0. 023%	
143	8. 848	8. 834	8. 872	HH	568	11903	0. 31%	0. 021%	
144	8. 877	8. 872	8. 896	HH	526	6921	0. 18%	0. 012%	
145	8. 930	8. 896	8. 948	HH	938	21399	0. 57%	0. 038%	
146	8. 975	8. 948	9. 004	HH	17075	190532	5. 04%	0. 340%	
147	9. 023	9. 004	9. 063	HH	1958	44141	1. 17%	0. 079%	
148	9. 094	9. 063	9. 132	HH	1383	44235	1. 17%	0. 079%	
149	9. 170	9. 132	9. 192	HH	1100	35286	0. 93%	0. 063%	
150	9. 220	9. 192	9. 236	HH	5422	71536	1. 89%	0. 128%	
151	9. 252	9. 236	9. 277	HH	7068	86822	2. 30%	0. 155%	
152	9. 294	9. 277	9. 321	HH	1630	33622	0. 89%	0. 060%	
153	9. 344	9. 321	9. 364	HH	1671	32818	0. 87%	0. 059%	
154	9. 394	9. 364	9. 415	HH	3207	58349	1. 54%	0. 104%	
155	9. 433	9. 415	9. 519	HH	2816	77779	2. 06%	0. 139%	
156	9. 550	9. 519	9. 566	HH	2740	43108	1. 14%	0. 077%	
157	9. 581	9. 566	9. 612	HH	2342	38228	1. 01%	0. 068%	
158	9. 633	9. 612	9. 650	HH	1244	22121	0. 58%	0. 039%	
159	9. 686	9. 650	9. 709	HH	2725	54164	1. 43%	0. 097%	
160	9. 729	9. 709	9. 742	HH	1499	24231	0. 64%	0. 043%	
161	9. 770	9. 742	9. 821	HH	13428	191098	5. 05%	0. 341%	
162	9. 849	9. 821	9. 873	HH	3212	63716	1. 68%	0. 114%	
163	9. 892	9. 873	9. 904	HH	3177	44132	1. 17%	0. 079%	
164	9. 921	9. 904	9. 942	HH	6485	91329	2. 41%	0. 163%	
165	9. 951	9. 942	9. 964	HH	2060	23980	0. 63%	0. 043%	
166	9. 982	9. 964	10. 024	HH	4360	81790	2. 16%	0. 146%	
167	10. 049	10. 024	10. 074	HH	12512	160115	4. 23%	0. 285%	
168	10. 095	10. 074	10. 132	HH	6349	110656	2. 93%	0. 197%	
169	10. 147	10. 132	10. 164	HH	2014	32903	0. 87%	0. 059%	
170	10. 195	10. 164	10. 242	HH	7708	173742	4. 59%	0. 310%	
171	10. 258	10. 242	10. 275	HH	2327	36262	0. 96%	0. 065%	
172	10. 291	10. 275	10. 315	HH	2157	39677	1. 05%	0. 071%	
173	10. 333	10. 315	10. 342	HH	1474	21080	0. 56%	0. 038%	
174	10. 365	10. 342	10. 437	HH	2172	78724	2. 08%	0. 140%	
175	10. 463	10. 437	10. 476	HH	1376	27573	0. 73%	0. 049%	
176	10. 491	10. 476	10. 501	HH	1355	19125	0. 51%	0. 034%	
177	10. 523	10. 501	10. 551	HH	2982	57485	1. 52%	0. 103%	
178	10. 574	10. 551	10. 608	HH	2910	69721	1. 84%	0. 124%	
179	10. 633	10. 608	10. 642	HH	3779	57592	1. 52%	0. 103%	
180	10. 660	10. 642	10. 682	HH	6863	106966	2. 83%	0. 191%	
181	10. 700	10. 682	10. 739	HH	4705	91342	2. 41%	0. 163%	
182	10. 777	10. 739	10. 812	HH	5781	141838	3. 75%	0. 253%	
183	10. 832	10. 812	10. 887	HH	8074	175817	4. 65%	0. 313%	
184	10. 949	10. 887	10. 962	HH	6133	169485	4. 48%	0. 302%	
185	10. 983	10. 962	11. 001	HH	10735	175875	4. 65%	0. 314%	
186	11. 012	11. 001	11. 041	HH	6975	103985	2. 75%	0. 185%	
187	11. 058	11. 041	11. 065	HH	3115	42431	1. 12%	0. 076%	
188	11. 082	11. 065	11. 100	HH	4928	74108	1. 96%	0. 132%	
189	11. 114	11. 100	11. 133	HH	3000	53981	1. 43%	0. 096%	
190	11. 185	11. 133	11. 230	HH	196747	2217756	58. 63%	3. 954%	
191	11. 259	11. 230	11. 304	HH	47242	589631	15. 59%	1. 051%	
192	11. 312	11. 304	11. 342	HH	2917	60435	1. 60%	0. 108%	
193	11. 360	11. 342	11. 384	HH	3111	68228	1. 80%	0. 122%	
194	11. 398	11. 384	11. 417	HH	2836	50852	1. 34%	0. 091%	

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195	11. 436	11. 417	11. 454	HH	3027	60058	1. 59%	0. 107%	
196	11. 477	11. 454	11. 517	HH	7088	156460	4. 14%	0. 279%	
197	11. 548	11. 517	11. 563	HH	3406	82211	2. 17%	0. 147%	
198	11. 584	11. 563	11. 603	HH	4060	85665	2. 26%	0. 153%	
199	11. 631	11. 603	11. 657	HH	5077	126608	3. 35%	0. 226%	
200	11. 720	11. 657	11. 756	HH	11148	320065	8. 46%	0. 571%	
201	11. 787	11. 756	11. 811	HH	5900	134433	3. 55%	0. 240%	
202	11. 839	11. 811	11. 861	HH	6209	130314	3. 44%	0. 232%	
203	11. 881	11. 861	11. 902	HH	5234	98106	2. 59%	0. 175%	
204	11. 920	11. 902	11. 931	HH	3666	57173	1. 51%	0. 102%	
205	11. 944	11. 931	11. 960	HH	3755	61586	1. 63%	0. 110%	
206	11. 992	11. 960	12. 007	HH	27766	366035	9. 68%	0. 653%	
207	12. 023	12. 007	12. 062	HH	35184	462102	12. 22%	0. 824%	
208	12. 107	12. 062	12. 125	HH	30519	561460	14. 84%	1. 001%	
209	12. 141	12. 125	12. 155	HH	21619	265562	7. 02%	0. 474%	
210	12. 171	12. 155	12. 204	HH	28111	388129	10. 26%	0. 692%	
211	12. 244	12. 204	12. 271	HH	4601	153300	4. 05%	0. 273%	
212	12. 308	12. 271	12. 331	HH	6170	171068	4. 52%	0. 305%	
213	12. 355	12. 331	12. 441	HH	15324	428272	11. 32%	0. 764%	
214	12. 464	12. 441	12. 512	HH	26505	434151	11. 48%	0. 774%	
215	12. 525	12. 512	12. 538	HH	5414	79537	2. 10%	0. 142%	
216	12. 556	12. 538	12. 585	HH	8238	165633	4. 38%	0. 295%	
217	12. 612	12. 585	12. 631	HH	8509	167883	4. 44%	0. 299%	
218	12. 643	12. 631	12. 659	HH	5455	85547	2. 26%	0. 153%	
219	12. 672	12. 659	12. 684	HH	5140	75512	2. 00%	0. 135%	
220	12. 716	12. 684	12. 732	HH	9796	207507	5. 49%	0. 370%	
221	12. 740	12. 732	12. 767	HH	7008	124058	3. 28%	0. 221%	
222	12. 787	12. 767	12. 826	HH	11880	275835	7. 29%	0. 492%	
223	12. 850	12. 826	12. 877	HH	16359	305024	8. 06%	0. 544%	
224	12. 899	12. 877	12. 918	HH	23350	352564	9. 32%	0. 629%	
225	12. 958	12. 918	12. 981	HH	14090	436611	11. 54%	0. 779%	
226	13. 018	12. 981	13. 062	HH	320356	3782848	100. 00%	6. 745%	
227	13. 078	13. 062	13. 095	HH	6644	110529	2. 92%	0. 197%	
228	13. 114	13. 095	13. 126	HH	6343	104707	2. 77%	0. 187%	
229	13. 174	13. 126	13. 185	HH	11422	297267	7. 86%	0. 530%	
230	13. 202	13. 185	13. 216	HH	16267	234770	6. 21%	0. 419%	
231	13. 227	13. 216	13. 287	HH	12672	367276	9. 71%	0. 655%	
232	13. 319	13. 287	13. 347	HH	304404	3510034	92. 79%	6. 259%	
233	13. 371	13. 347	13. 387	HH	33064	448480	11. 86%	0. 800%	
234	13. 403	13. 387	13. 434	HH	31482	455084	12. 03%	0. 811%	
235	13. 455	13. 434	13. 469	HH	7792	150847	3. 99%	0. 269%	
236	13. 488	13. 469	13. 504	HH	14600	233007	6. 16%	0. 415%	
237	13. 517	13. 504	13. 542	HH	13457	218440	5. 77%	0. 389%	
238	13. 583	13. 542	13. 611	HH	19461	436181	11. 53%	0. 778%	
239	13. 619	13. 611	13. 631	HH	8169	94294	2. 49%	0. 168%	
240	13. 652	13. 631	13. 681	HH	10626	253918	6. 71%	0. 453%	
241	13. 714	13. 681	13. 754	HH	13799	403179	10. 66%	0. 719%	
242	13. 777	13. 754	13. 804	HH	24766	447884	11. 84%	0. 799%	
243	13. 816	13. 804	13. 844	HH	7935	178478	4. 72%	0. 318%	
244	13. 907	13. 844	13. 944	HH	47314	1055648	27. 91%	1. 882%	
245	13. 973	13. 944	13. 991	HH	10514	248710	6. 57%	0. 443%	
246	14. 015	13. 991	14. 035	HH	25587	427865	11. 31%	0. 763%	

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247	14. 055	14. 035	14. 076	HH	29905	458132	12. 11%	0. 817%	
248	14. 095	14. 076	14. 122	HH	16192	336567	8. 90%	0. 600%	
249	14. 185	14. 122	14. 206	HH	30374	840424	22. 22%	1. 499%	
250	14. 226	14. 206	14. 267	HH	28565	560575	14. 82%	1. 000%	
251	14. 301	14. 267	14. 324	HH	14754	378325	10. 00%	0. 675%	
252	14. 344	14. 324	14. 371	HH	10828	276466	7. 31%	0. 493%	
253	14. 390	14. 371	14. 404	HH	10557	196273	5. 19%	0. 350%	
254	14. 417	14. 404	14. 429	HH	10144	147610	3. 90%	0. 263%	
255	14. 438	14. 429	14. 477	HH	9901	260324	6. 88%	0. 464%	
256	14. 497	14. 477	14. 529	HH	9976	279835	7. 40%	0. 499%	
257	14. 549	14. 529	14. 562	HH	9434	177628	4. 70%	0. 317%	
258	14. 611	14. 562	14. 628	HH	15582	528077	13. 96%	0. 942%	
259	14. 648	14. 628	14. 679	HH	26630	514590	13. 60%	0. 918%	
260	14. 724	14. 679	14. 736	HH	14619	416863	11. 02%	0. 743%	
261	14. 749	14. 736	14. 795	HH	15139	451372	11. 93%	0. 805%	
262	14. 824	14. 795	14. 863	HH	26909	718131	18. 98%	1. 280%	
263	14. 889	14. 863	14. 913	HH	47614	826568	21. 85%	1. 474%	
264	14. 952	14. 913	14. 985	HH	30631	822676	21. 75%	1. 467%	
265	15. 013	14. 985	15. 032	HH	15668	377970	9. 99%	0. 674%	
266	15. 063	15. 032	15. 112	HH	24503	837282	22. 13%	1. 493%	
267	15. 156	15. 112	15. 173	HH	18099	501686	13. 26%	0. 895%	
268	15. 204	15. 173	15. 225	HH	144275	2001779	52. 92%	3. 569%	
269	15. 246	15. 225	15. 278	HH	144847	1956916	51. 73%	3. 489%	
270	15. 294	15. 278	15. 327	HH	15047	409321	10. 82%	0. 730%	
271	15. 366	15. 327	15. 415	HH	43985	1131360	29. 91%	2. 017%	
272	15. 445	15. 415	15. 477	HH	21750	634766	16. 78%	1. 132%	
273	15. 509	15. 477	15. 529	HH	22662	546722	14. 45%	0. 975%	
274	15. 550	15. 529	15. 612	HH	22271	893041	23. 61%	1. 592%	
275	15. 649	15. 612	15. 677	HH	23205	706003	18. 66%	1. 259%	
276	15. 691	15. 677	15. 714	HH	18476	372968	9. 86%	0. 665%	
277	15. 745	15. 714	15. 757	HH	16002	400629	10. 59%	0. 714%	
278	15. 800	15. 757	15. 822	HH	22156	744510	19. 68%	1. 328%	
279	15. 838	15. 822	15. 857	HH	21754	419941	11. 10%	0. 749%	
280	15. 880	15. 857	15. 901	HH	42306	752879	19. 90%	1. 342%	
281	15. 918	15. 901	15. 946	HH	28325	607877	16. 07%	1. 084%	
282	15. 965	15. 946	15. 983	HH	23282	465894	12. 32%	0. 831%	
283	16. 040	15. 983	16. 077	HH	33714	1423860	37. 64%	2. 539%	
284	16. 118	16. 077	16. 181	HH	26139	1270213	33. 58%	2. 265%	
285	16. 203	16. 181	16. 222	HH	24702	524640	13. 87%	0. 935%	
286	16. 242	16. 222	16. 262	HH	25631	534088	14. 12%	0. 952%	
287	16. 309	16. 262	16. 336	HH	25745	1004796	26. 56%	1. 792%	
288	16. 350	16. 336	16. 361	HH	19821	287309	7. 60%	0. 512%	
289	16. 381	16. 361	16. 399	HH	20892	465637	12. 31%	0. 830%	
290	16. 415	16. 399	16. 424	HH	20429	301844	7. 98%	0. 538%	
291	16. 439	16. 424	16. 456	HH	21186	394629	10. 43%	0. 704%	
292	16. 481	16. 456	16. 491	HH	24283	475889	12. 58%	0. 849%	
Sum of corrected areas:									
						56082839			

FG011325. M Sat Feb 01 02:24:20 2025

## Report of Analysis

Client:	RU2 Engineering, LLC			Date Collected:	01/29/25	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR			Date Received:	01/30/25	
Client Sample ID:	JPP-46.1-012925			SDG No.:	Q1232	
Lab Sample ID:	Q1232-05			Matrix:	SOIL	
Analytical Method:	8015D DRO			% Solid:	93.8	Decanted:
Sample Wt/Vol:	30.06	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
FG015285.D	10	01/31/25 08:50	01/31/25 18:39	PB166415

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
<b>TARGETS</b>						
DRO	DRO	62900		1970		17700 ug/kg
<b>SURROGATES</b>						
16416-32-3	Tetracosane-d50	1.11		37 - 130		56% SPK: 20

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG013125\  
Data File : FG015285.D  
Signal(s) : FID1A.ch  
Acq On : 31 Jan 2025 18:39  
Operator : YP\AJ  
Sample : Q1232-05 10X  
Misc :  
ALS Vial : 22 Sample Multiplier: 1

Instrument :  
FID\_G  
ClientSampleId :  
JPP-46.1-012925

Integration File: autoint1.e  
Quant Time: Feb 01 01:17:15 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 : Rx1-1ms  
Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

9) S TETRACOSANE-d50 (SURR...	15.059	142421	1.110 ug/ml
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Target Compounds

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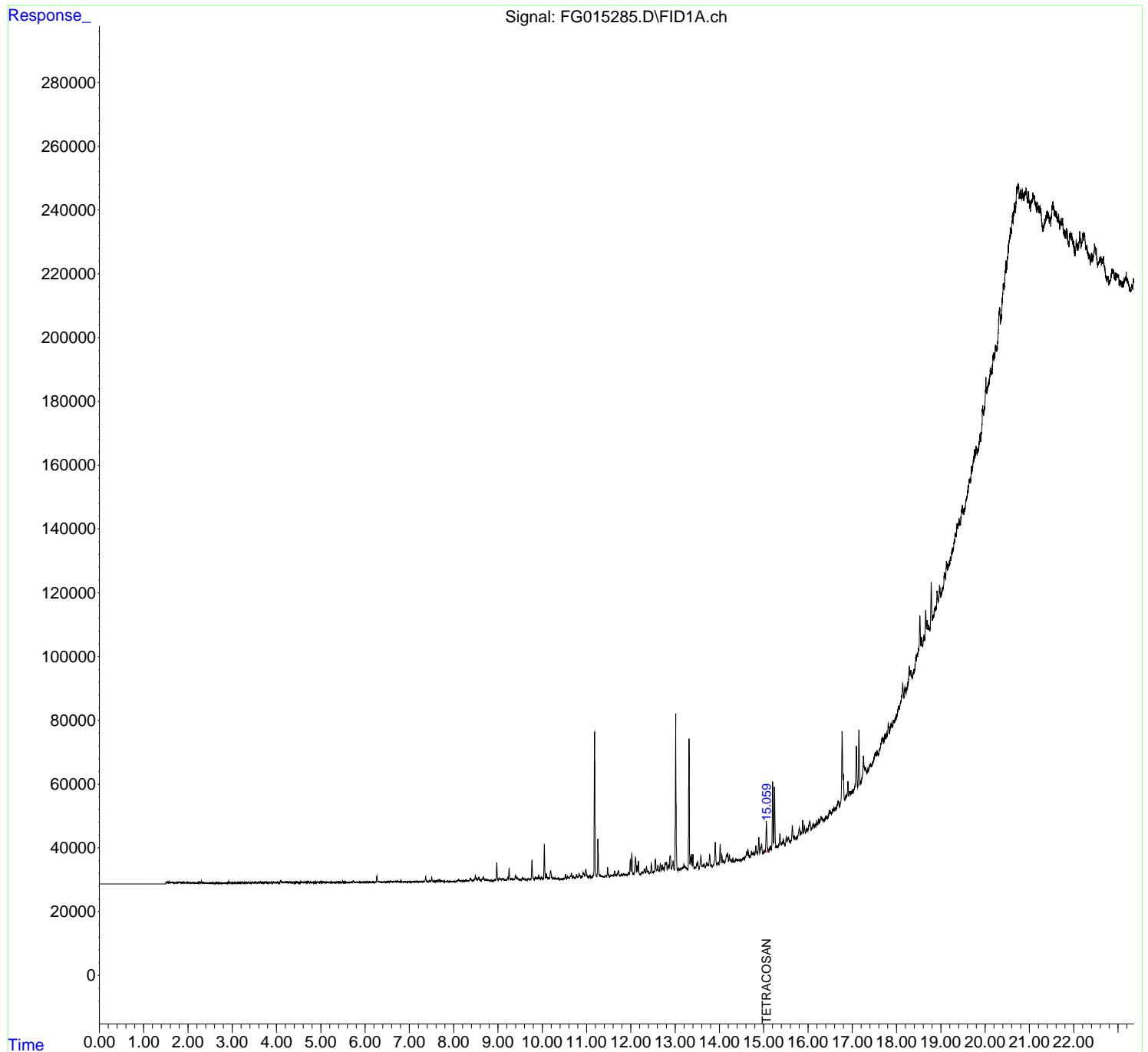
(f)=RT Delta > 1/2 Window (m)=manual int.

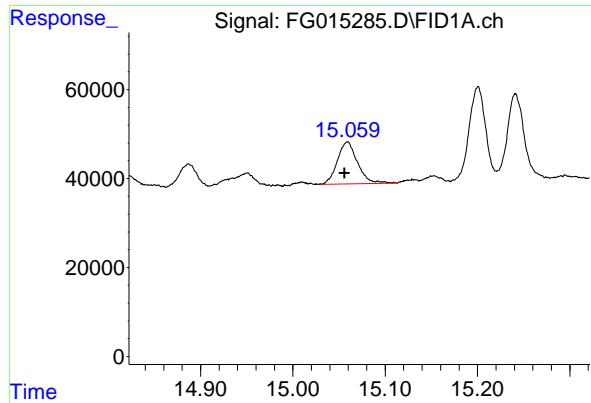
Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG013125\  
Data File : FG015285.D  
Signal(s) : FID1A.ch  
Acq On : 31 Jan 2025 18:39  
Operator : YP\AJ  
Sample : Q1232-05 10X  
Misc :  
ALS Vial : 22 Sample Multiplier: 1

Instrument :  
FID\_G  
ClientSampleId :  
JPP-46.1-012925

Integration File: autoint1.e  
Quant Time: Feb 01 01:17:15 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 : Rx1-1ms  
Signal Info : 20mx0.18mmx0.18um





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 15.059 min  
Delta R.T.: 0.003 min  
Instrument:  
Response: 142421 FID\_G  
Conc: 1.11 ug/ml ClientSampleId :  
JPP-46.1-012925

## rteres

## Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG013125\  
 Data File : FG015285.D  
 Signal (s) : FID1A.ch  
 Acq On : 31 Jan 2025 18:39  
 Sample : Q1232-05 10X  
 Misc :  
 ALS Vial : 22 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	4.373	4.350	4.378	BH	34	-49	-0.01%	-0.000%
2	4.385	4.378	4.415	PH	62	-180	-0.02%	-0.001%
3	4.419	4.415	4.427	PH	8	-99	-0.01%	-0.000%
4	4.440	4.427	4.444	PH	52	-99	-0.01%	-0.000%
5	4.452	4.444	4.468	PH	44	-285	-0.04%	-0.001%
6	4.475	4.468	4.488	PH	43	30	0.00%	0.000%
7	4.491	4.488	4.495	PH	34	-20	-0.00%	-0.000%
8	4.502	4.495	4.533	PH	22	-190	-0.03%	-0.001%
9	4.550	4.533	4.557	PH	99	643	0.09%	0.003%
10	4.564	4.557	4.627	HH	100	2473	0.33%	0.010%
11	4.630	4.627	4.644	HH	74	316	0.04%	0.001%
12	4.660	4.644	4.680	PH	146	954	0.13%	0.004%
13	4.684	4.680	4.703	PH	49	3	0.00%	0.000%
14	4.717	4.703	4.744	PH	195	1337	0.18%	0.005%
15	4.747	4.744	4.753	PH	10	-101	-0.01%	-0.000%
16	4.777	4.753	4.818	PH	141	1291	0.17%	0.005%
17	4.823	4.818	4.828	PH	14	38	0.01%	0.000%
18	4.864	4.828	4.888	PH	77	637	0.09%	0.003%
19	4.893	4.888	4.955	PH	97	1212	0.16%	0.005%
20	4.963	4.955	4.968	HH	112	361	0.05%	0.001%
21	4.973	4.968	4.986	HH	86	491	0.07%	0.002%
22	4.991	4.986	5.000	HH	122	282	0.04%	0.001%
23	5.017	5.000	5.038	PH	101	715	0.10%	0.003%
24	5.045	5.038	5.055	PH	96	587	0.08%	0.002%
25	5.061	5.055	5.071	HH	96	376	0.05%	0.002%
26	5.074	5.071	5.090	HH	76	298	0.04%	0.001%
27	5.098	5.090	5.122	PH	70	215	0.03%	0.001%
28	5.151	5.122	5.158	PH	91	178	0.02%	0.001%
29	5.166	5.158	5.171	PH	30	1	0.00%	0.000%
30	5.174	5.171	5.180	PH	13	42	0.01%	0.000%
31	5.192	5.180	5.219	PH	93	774	0.10%	0.003%
32	5.233	5.219	5.239	PH	97	288	0.04%	0.001%
33	5.243	5.239	5.249	PH	49	71	0.01%	0.000%
34	5.261	5.249	5.268	PH	86	290	0.04%	0.001%
35	5.308	5.268	5.328	PH	125	829	0.11%	0.003%
36	5.337	5.328	5.351	PH	83	284	0.04%	0.001%

					rteres			
37	5. 364	5. 351	5. 411	PH	175	1595	0. 22%	0. 006%
38	5. 416	5. 411	5. 423	PH	41	40	0. 01%	0. 000%
39	5. 435	5. 423	5. 459	PH	53	56	0. 01%	0. 000%
40	5. 466	5. 459	5. 472	PH	68	37	0. 01%	0. 000%
41	5. 496	5. 472	5. 523	PH	351	3909	0. 53%	0. 016%
42	5. 532	5. 523	5. 564	PH	155	984	0. 13%	0. 004%
43	5. 569	5. 564	5. 575	PH	63	244	0. 03%	0. 001%
44	5. 579	5. 575	5. 584	PH	66	138	0. 02%	0. 001%
45	5. 587	5. 584	5. 594	PH	20	-77	-0. 01%	-0. 000%
46	5. 599	5. 594	5. 610	PH	75	-63	-0. 01%	-0. 000%
47	5. 625	5. 610	5. 637	PH	86	299	0. 04%	0. 001%
48	5. 642	5. 637	5. 671	PH	60	70	0. 01%	0. 000%
49	5. 691	5. 671	5. 717	PH	182	2513	0. 34%	0. 010%
50	5. 734	5. 717	5. 756	HH	563	6870	0. 93%	0. 027%
51	5. 765	5. 756	5. 785	HH	175	1706	0. 23%	0. 007%
52	5. 793	5. 785	5. 797	HH	109	499	0. 07%	0. 002%
53	5. 812	5. 797	5. 843	HH	127	2177	0. 29%	0. 009%
54	5. 862	5. 843	5. 872	PH	149	1306	0. 18%	0. 005%
55	5. 878	5. 872	5. 916	HH	168	2516	0. 34%	0. 010%
56	5. 920	5. 916	5. 948	HH	108	1365	0. 18%	0. 005%
57	5. 963	5. 948	5. 974	PH	174	1511	0. 20%	0. 006%
58	5. 988	5. 974	5. 993	HH	168	1260	0. 17%	0. 005%
59	6. 004	5. 993	6. 010	HH	105	982	0. 13%	0. 004%
60	6. 013	6. 010	6. 040	HH	159	1608	0. 22%	0. 006%
61	6. 046	6. 040	6. 051	PH	93	422	0. 06%	0. 002%
62	6. 066	6. 051	6. 070	HH	187	1005	0. 14%	0. 004%
63	6. 074	6. 070	6. 091	HH	147	924	0. 12%	0. 004%
64	6. 096	6. 091	6. 121	PH	136	966	0. 13%	0. 004%
65	6. 127	6. 121	6. 152	HH	108	1145	0. 15%	0. 005%
66	6. 173	6. 152	6. 181	HH	193	1833	0. 25%	0. 007%
67	6. 195	6. 181	6. 200	HH	114	939	0. 13%	0. 004%
68	6. 228	6. 200	6. 246	HH	186	2689	0. 36%	0. 011%
69	6. 266	6. 246	6. 306	HH	1975	24030	3. 25%	0. 096%
70	6. 318	6. 306	6. 372	HH	255	5335	0. 72%	0. 021%
71	6. 381	6. 372	6. 403	HH	148	1691	0. 23%	0. 007%
72	6. 439	6. 403	6. 464	HH	347	6881	0. 93%	0. 027%
73	6. 468	6. 464	6. 487	HH	145	1251	0. 17%	0. 005%
74	6. 506	6. 487	6. 510	HH	178	1839	0. 25%	0. 007%
75	6. 523	6. 510	6. 536	HH	203	2488	0. 34%	0. 010%
76	6. 541	6. 536	6. 548	HH	191	950	0. 13%	0. 004%
77	6. 569	6. 548	6. 584	HH	383	5930	0. 80%	0. 024%
78	6. 588	6. 584	6. 594	HH	203	1046	0. 14%	0. 004%
79	6. 599	6. 594	6. 605	HH	248	1440	0. 19%	0. 006%
80	6. 622	6. 605	6. 627	HH	243	2736	0. 37%	0. 011%
81	6. 632	6. 627	6. 635	HH	249	1001	0. 14%	0. 004%
82	6. 642	6. 635	6. 660	HH	332	3814	0. 52%	0. 015%
83	6. 664	6. 660	6. 686	HH	244	3445	0. 47%	0. 014%
84	6. 692	6. 686	6. 704	HH	273	2196	0. 30%	0. 009%
85	6. 727	6. 704	6. 750	HH	404	7359	0. 99%	0. 029%
86	6. 757	6. 750	6. 764	HH	209	1475	0. 20%	0. 006%
87	6. 765	6. 764	6. 769	HH	216	602	0. 08%	0. 002%
88	6. 774	6. 769	6. 780	HH	196	1155	0. 16%	0. 005%
89	6. 811	6. 780	6. 830	HH	476	8854	1. 20%	0. 035%

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90	6. 834	6. 830	6. 852	HH	236	2809	0. 38%	0. 011%	
91	6. 860	6. 852	6. 870	HH	225	1957	0. 26%	0. 008%	
92	6. 883	6. 870	6. 889	HH	270	2528	0. 34%	0. 010%	
93	6. 894	6. 889	6. 934	HH	238	4682	0. 63%	0. 019%	
94	6. 938	6. 934	6. 947	HH	174	1243	0. 17%	0. 005%	
95	6. 956	6. 947	6. 966	HH	207	1818	0. 25%	0. 007%	
96	6. 973	6. 966	6. 995	HH	210	2821	0. 38%	0. 011%	
97	7. 010	6. 995	7. 032	HH	252	4079	0. 55%	0. 016%	
98	7. 037	7. 032	7. 042	HH	156	808	0. 11%	0. 003%	
99	7. 061	7. 042	7. 072	HH	200	3196	0. 43%	0. 013%	
100	7. 083	7. 072	7. 094	HH	223	2463	0. 33%	0. 010%	
101	7. 097	7. 094	7. 109	HH	284	1696	0. 23%	0. 007%	
102	7. 117	7. 109	7. 133	HH	205	2693	0. 36%	0. 011%	
103	7. 139	7. 133	7. 146	HH	236	1593	0. 22%	0. 006%	
104	7. 169	7. 146	7. 181	HH	249	4366	0. 59%	0. 017%	
105	7. 184	7. 181	7. 189	HH	235	890	0. 12%	0. 004%	
106	7. 198	7. 189	7. 204	HH	234	1824	0. 25%	0. 007%	
107	7. 215	7. 204	7. 220	HH	241	2134	0. 29%	0. 009%	
108	7. 231	7. 220	7. 250	HH	319	5062	0. 68%	0. 020%	
109	7. 267	7. 250	7. 281	HH	410	6193	0. 84%	0. 025%	
110	7. 286	7. 281	7. 293	HH	331	2181	0. 29%	0. 009%	
111	7. 309	7. 293	7. 341	HH	370	8749	1. 18%	0. 035%	
112	7. 368	7. 341	7. 402	HH	1793	26381	3. 57%	0. 105%	
113	7. 411	7. 402	7. 418	HH	464	3747	0. 51%	0. 015%	
114	7. 421	7. 418	7. 425	HH	357	1551	0. 21%	0. 006%	
115	7. 431	7. 425	7. 435	HH	367	1800	0. 24%	0. 007%	
116	7. 452	7. 435	7. 484	HH	501	11175	1. 51%	0. 045%	
117	7. 506	7. 484	7. 534	HH	1634	22345	3. 02%	0. 089%	
118	7. 551	7. 534	7. 572	HH	498	9223	1. 25%	0. 037%	
119	7. 584	7. 572	7. 591	HH	443	4405	0. 60%	0. 018%	
120	7. 629	7. 591	7. 648	HH	485	14033	1. 90%	0. 056%	
121	7. 680	7. 648	7. 704	HH	833	18374	2. 48%	0. 073%	
122	7. 708	7. 704	7. 734	HH	451	7336	0. 99%	0. 029%	
123	7. 737	7. 734	7. 745	HH	397	2717	0. 37%	0. 011%	
124	7. 751	7. 745	7. 770	HH	356	5162	0. 70%	0. 021%	
125	7. 776	7. 770	7. 797	HH	377	5146	0. 70%	0. 021%	
126	7. 806	7. 797	7. 822	HH	383	5129	0. 69%	0. 020%	
127	7. 857	7. 822	7. 882	HH	454	12384	1. 67%	0. 049%	
128	7. 891	7. 882	7. 913	HH	359	5678	0. 77%	0. 023%	
129	7. 918	7. 913	7. 937	HH	365	4069	0. 55%	0. 016%	
130	7. 941	7. 937	7. 952	HH	297	2464	0. 33%	0. 010%	
131	7. 972	7. 952	7. 979	HH	398	5101	0. 69%	0. 020%	
132	7. 983	7. 979	7. 995	HH	332	2685	0. 36%	0. 011%	
133	7. 999	7. 995	8. 006	HH	302	1808	0. 24%	0. 007%	
134	8. 022	8. 006	8. 027	HH	359	3820	0. 52%	0. 015%	
135	8. 044	8. 027	8. 080	HH	378	10488	1. 42%	0. 042%	
136	8. 112	8. 080	8. 160	HH	1078	28238	3. 82%	0. 113%	
137	8. 171	8. 160	8. 185	HH	496	6928	0. 94%	0. 028%	
138	8. 188	8. 185	8. 202	HH	455	4234	0. 57%	0. 017%	
139	8. 206	8. 202	8. 229	HH	535	7434	1. 01%	0. 030%	
140	8. 233	8. 229	8. 235	HH	415	1498	0. 20%	0. 006%	
141	8. 239	8. 235	8. 242	HH	459	1938	0. 26%	0. 008%	

					rteres				
142	8. 270	8. 242	8. 297	HH	838	20060	2. 71%	0. 080%	
143	8. 301	8. 297	8. 307	HH	565	3338	0. 45%	0. 013%	
144	8. 317	8. 307	8. 329	HH	556	6564	0. 89%	0. 026%	
145	8. 384	8. 329	8. 425	HH	1255	44111	5. 96%	0. 176%	
146	8. 489	8. 425	8. 505	HH	2106	48624	6. 57%	0. 194%	
147	8. 517	8. 505	8. 532	HH	1509	19360	2. 62%	0. 077%	
148	8. 566	8. 532	8. 604	HH	1581	45245	6. 12%	0. 181%	
149	8. 607	8. 604	8. 615	HH	722	4713	0. 64%	0. 019%	
150	8. 675	8. 615	8. 712	HH	1494	58586	7. 92%	0. 234%	
151	8. 723	8. 712	8. 750	HH	907	17051	2. 31%	0. 068%	
152	8. 768	8. 750	8. 806	HH	898	22489	3. 04%	0. 090%	
153	8. 815	8. 806	8. 835	HH	672	10037	1. 36%	0. 040%	
154	8. 842	8. 835	8. 872	HH	602	11938	1. 61%	0. 048%	
155	8. 898	8. 872	8. 905	HH	621	11092	1. 50%	0. 044%	
156	8. 936	8. 905	8. 952	HH	834	20501	2. 77%	0. 082%	
157	8. 974	8. 952	9. 002	HH	6258	78561	10. 62%	0. 314%	
158	9. 024	9. 002	9. 049	HH	1424	31033	4. 20%	0. 124%	
159	9. 053	9. 049	9. 076	HH	995	14528	1. 96%	0. 058%	
160	9. 098	9. 076	9. 106	HH	1148	18444	2. 49%	0. 074%	
161	9. 110	9. 106	9. 152	HH	1098	24600	3. 33%	0. 098%	
162	9. 160	9. 152	9. 169	HH	844	8662	1. 17%	0. 035%	
163	9. 174	9. 169	9. 177	HH	807	3815	0. 52%	0. 015%	
164	9. 219	9. 177	9. 234	HH	1617	36456	4. 93%	0. 146%	
165	9. 252	9. 234	9. 277	HH	4346	59122	7. 99%	0. 236%	
166	9. 315	9. 277	9. 335	HH	1274	38107	5. 15%	0. 152%	
167	9. 344	9. 335	9. 366	HH	1039	17962	2. 43%	0. 072%	
168	9. 394	9. 366	9. 419	HH	2246	47601	6. 44%	0. 190%	
169	9. 434	9. 419	9. 475	HH	1595	39059	5. 28%	0. 156%	
170	9. 489	9. 475	9. 504	HH	941	14645	1. 98%	0. 059%	
171	9. 511	9. 504	9. 515	HH	814	5387	0. 73%	0. 022%	
172	9. 548	9. 515	9. 566	HH	1443	31128	4. 21%	0. 124%	
173	9. 580	9. 566	9. 606	HH	1326	24903	3. 37%	0. 099%	
174	9. 634	9. 606	9. 639	HH	984	17377	2. 35%	0. 069%	
175	9. 644	9. 639	9. 652	HH	871	6315	0. 85%	0. 025%	
176	9. 658	9. 652	9. 661	HH	895	4662	0. 63%	0. 019%	
177	9. 685	9. 661	9. 709	HH	1398	31069	4. 20%	0. 124%	
178	9. 731	9. 709	9. 741	HH	1148	19162	2. 59%	0. 077%	
179	9. 769	9. 741	9. 823	HH	7000	118968	16. 09%	0. 475%	
180	9. 849	9. 823	9. 880	HH	1769	46588	6. 30%	0. 186%	
181	9. 890	9. 880	9. 904	HH	1406	17939	2. 43%	0. 072%	
182	9. 921	9. 904	9. 940	HH	2260	37595	5. 08%	0. 150%	
183	9. 948	9. 940	9. 965	HH	1328	18527	2. 51%	0. 074%	
184	9. 981	9. 965	10. 009	HH	1801	34907	4. 72%	0. 139%	
185	10. 016	10. 009	10. 021	HH	1103	7407	1. 00%	0. 030%	
186	10. 049	10. 021	10. 075	HH	12009	150083	20. 29%	0. 600%	
187	10. 094	10. 075	10. 164	HH	2781	86521	11. 70%	0. 346%	
188	10. 191	10. 164	10. 237	HH	3648	94632	12. 79%	0. 378%	
189	10. 258	10. 237	10. 287	HH	1470	37148	5. 02%	0. 148%	
190	10. 292	10. 287	10. 314	HH	1381	19241	2. 60%	0. 077%	
191	10. 334	10. 314	10. 351	HH	1258	25675	3. 47%	0. 103%	
192	10. 359	10. 351	10. 394	HH	1288	29425	3. 98%	0. 118%	
193	10. 400	10. 394	10. 407	HH	1098	8239	1. 11%	0. 033%	
194	10. 409	10. 407	10. 421	HH	1055	8566	1. 16%	0. 034%	

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195	10. 431	10. 421	10. 436	HH	1096	9246	1. 25%	0. 037%	
196	10. 459	10. 436	10. 471	HH	1172	23435	3. 17%	0. 094%	
197	10. 489	10. 471	10. 502	HH	1162	20319	2. 75%	0. 081%	
198	10. 525	10. 502	10. 551	HH	2531	49991	6. 76%	0. 200%	
199	10. 572	10. 551	10. 609	HH	1940	52802	7. 14%	0. 211%	
200	10. 630	10. 609	10. 636	HH	1849	27209	3. 68%	0. 109%	
201	10. 659	10. 636	10. 683	HH	2920	59637	8. 06%	0. 238%	
202	10. 700	10. 683	10. 755	HH	2087	67578	9. 14%	0. 270%	
203	10. 777	10. 755	10. 814	HH	2417	64854	8. 77%	0. 259%	
204	10. 832	10. 814	10. 897	HH	2961	99504	13. 45%	0. 398%	
205	10. 927	10. 897	10. 939	HH	2993	57322	7. 75%	0. 229%	
206	10. 947	10. 939	10. 960	HH	2653	31149	4. 21%	0. 124%	
207	10. 983	10. 960	11. 042	HH	3999	121522	16. 43%	0. 485%	
208	11. 053	11. 042	11. 061	HH	1791	19708	2. 66%	0. 079%	
209	11. 080	11. 061	11. 095	HH	2286	40185	5. 43%	0. 161%	
210	11. 111	11. 095	11. 130	HH	1799	34308	4. 64%	0. 137%	
211	11. 148	11. 130	11. 157	HH	2366	33492	4. 53%	0. 134%	
212	11. 182	11. 157	11. 230	HH	46828	564532	76. 33%	2. 255%	
213	11. 257	11. 230	11. 280	HH	13664	185214	25. 04%	0. 740%	
214	11. 289	11. 280	11. 309	HH	2515	39052	5. 28%	0. 156%	
215	11. 315	11. 309	11. 346	HH	2069	42999	5. 81%	0. 172%	
216	11. 355	11. 346	11. 364	HH	1954	21037	2. 84%	0. 084%	
217	11. 369	11. 364	11. 389	HH	1909	27307	3. 69%	0. 109%	
218	11. 391	11. 389	11. 415	HH	1885	28066	3. 79%	0. 112%	
219	11. 434	11. 415	11. 454	HH	2291	46289	6. 26%	0. 185%	
220	11. 476	11. 454	11. 520	HH	4831	108644	14. 69%	0. 434%	
221	11. 566	11. 520	11. 600	HH	2297	101710	13. 75%	0. 406%	
222	11. 633	11. 600	11. 665	HH	3553	101076	13. 67%	0. 404%	
223	11. 719	11. 665	11. 764	HH	3619	154422	20. 88%	0. 617%	
224	11. 785	11. 764	11. 805	HH	2694	58537	7. 91%	0. 234%	
225	11. 840	11. 805	11. 857	HH	2804	75119	10. 16%	0. 300%	
226	11. 880	11. 857	11. 906	HH	2548	68845	9. 31%	0. 275%	
227	11. 947	11. 906	11. 962	HH	3227	88184	11. 92%	0. 352%	
228	11. 990	11. 962	12. 005	HH	7266	117043	15. 83%	0. 468%	
229	12. 021	12. 005	12. 065	HH	8681	162471	21. 97%	0. 649%	
230	12. 106	12. 065	12. 124	HH	7790	174442	23. 59%	0. 697%	
231	12. 140	12. 124	12. 154	HH	5300	77493	10. 48%	0. 310%	
232	12. 171	12. 154	12. 200	HH	6649	121387	16. 41%	0. 485%	
233	12. 219	12. 200	12. 227	HH	2725	42297	5. 72%	0. 169%	
234	12. 252	12. 227	12. 272	HH	3289	81390	11. 00%	0. 325%	
235	12. 307	12. 272	12. 335	HH	4312	129052	17. 45%	0. 516%	
236	12. 354	12. 335	12. 389	HH	4966	122267	16. 53%	0. 488%	
237	12. 395	12. 389	12. 424	HH	3304	64454	8. 71%	0. 257%	
238	12. 436	12. 424	12. 442	HH	3107	33000	4. 46%	0. 132%	
239	12. 463	12. 442	12. 488	HH	5840	115036	15. 55%	0. 460%	
240	12. 494	12. 488	12. 510	HH	3160	42076	5. 69%	0. 168%	
241	12. 553	12. 510	12. 579	HH	7066	184221	24. 91%	0. 736%	
242	12. 610	12. 579	12. 630	HH	5298	132895	17. 97%	0. 531%	
243	12. 638	12. 630	12. 642	HH	3683	24283	3. 28%	0. 097%	
244	12. 665	12. 642	12. 684	HH	5828	117366	15. 87%	0. 469%	
245	12. 709	12. 684	12. 727	HH	5481	117278	15. 86%	0. 469%	
246	12. 740	12. 727	12. 752	HH	4504	62904	8. 51%	0. 251%	

					rteres					
247	12. 775	12. 752	12. 785	HH	6157	104076	14. 07%	0. 416%		
248	12. 801	12. 785	12. 820	HH	6356	113411	15. 33%	0. 453%		
249	12. 841	12. 820	12. 860	HH	5556	116177	15. 71%	0. 464%		
250	12. 888	12. 860	12. 915	HH	8375	206493	27. 92%	0. 825%		
251	12. 954	12. 915	12. 985	HH	6811	218173	29. 50%	0. 872%		
252	13. 012	12. 985	13. 057	HH	52956	739599	100. 00%	2. 955%		
253	13. 076	13. 057	13. 095	HH	4499	92532	12. 51%	0. 370%		
254	13. 114	13. 095	13. 130	HH	4411	87968	11. 89%	0. 351%		
255	13. 151	13. 130	13. 157	HH	4524	69585	9. 41%	0. 278%		
256	13. 170	13. 157	13. 183	HH	4787	70461	9. 53%	0. 281%		
257	13. 199	13. 183	13. 215	HH	5722	98944	13. 38%	0. 395%		
258	13. 225	13. 215	13. 241	HH	4920	72537	9. 81%	0. 290%		
259	13. 249	13. 241	13. 285	HH	4623	115229	15. 58%	0. 460%		
260	13. 312	13. 285	13. 334	HH	44763	564810	76. 37%	2. 256%		
261	13. 345	13. 334	13. 356	HH	7622	92627	12. 52%	0. 370%		
262	13. 369	13. 356	13. 385	HH	8771	124956	16. 90%	0. 499%		
263	13. 400	13. 385	13. 432	HH	8815	177283	23. 97%	0. 708%		
264	13. 448	13. 432	13. 466	HH	4837	96082	12. 99%	0. 384%		
265	13. 487	13. 466	13. 497	HH	5911	97454	13. 18%	0. 389%		
266	13. 513	13. 497	13. 542	HH	6457	144550	19. 54%	0. 577%		
267	13. 580	13. 542	13. 620	HH	8250	275641	37. 27%	1. 101%		
268	13. 624	13. 620	13. 630	HH	5215	28974	3. 92%	0. 116%		
269	13. 652	13. 630	13. 682	HH	5912	167145	22. 60%	0. 668%		
270	13. 713	13. 682	13. 727	HH	6328	148616	20. 09%	0. 594%		
271	13. 738	13. 727	13. 753	HH	5564	87245	11. 80%	0. 349%		
272	13. 777	13. 753	13. 826	HH	8603	273925	37. 04%	1. 094%		
273	13. 841	13. 826	13. 852	HH	5224	82046	11. 09%	0. 328%		
274	13. 904	13. 852	13. 937	HH	12555	379571	51. 32%	1. 516%		
275	13. 972	13. 937	13. 989	HH	6214	182721	24. 71%	0. 730%		
276	14. 014	13. 989	14. 035	HH	12027	237332	32. 09%	0. 948%		
277	14. 052	14. 035	14. 077	HH	8698	181398	24. 53%	0. 725%		
278	14. 095	14. 077	14. 119	HH	6807	162143	21. 92%	0. 648%		
279	14. 158	14. 119	14. 170	HH	8547	230358	31. 15%	0. 920%		
280	14. 183	14. 170	14. 208	HH	9237	181236	24. 50%	0. 724%		
281	14. 225	14. 208	14. 241	HH	8625	151427	20. 47%	0. 605%		
282	14. 250	14. 241	14. 278	HH	7038	151993	20. 55%	0. 607%		
283	14. 302	14. 278	14. 324	HH	7411	187793	25. 39%	0. 750%		
284	14. 342	14. 324	14. 347	HH	6872	91585	12. 38%	0. 366%		
285	14. 370	14. 347	14. 376	HH	7112	121817	16. 47%	0. 487%		
286	14. 391	14. 376	14. 404	HH	7132	118238	15. 99%	0. 472%		
287	14. 410	14. 404	14. 427	HH	6971	96813	13. 09%	0. 387%		
288	14. 451	14. 427	14. 476	HH	7088	204614	27. 67%	0. 817%		
289	14. 493	14. 476	14. 506	HH	7107	125376	16. 95%	0. 501%		
290	14. 542	14. 506	14. 566	HH	7639	264387	35. 75%	1. 056%		
291	14. 613	14. 566	14. 630	HH	9675	329335	44. 53%	1. 316%		
292	14. 644	14. 630	14. 684	HH	10295	285783	38. 64%	1. 142%		
293	14. 721	14. 684	14. 740	HH	9783	296929	40. 15%	1. 186%		
294	14. 749	14. 740	14. 760	HH	9145	107928	14. 59%	0. 431%		
295	14. 773	14. 760	14. 794	HH	9389	179433	24. 26%	0. 717%		
296	14. 823	14. 794	14. 863	HH	11424	403764	54. 59%	1. 613%		
297	14. 887	14. 863	14. 910	HH	14151	318102	43. 01%	1. 271%		
298	14. 950	14. 910	14. 977	HH	12067	424178	57. 35%	1. 695%		
299	14. 984	14. 977	14. 997	HH	9385	110675	14. 96%	0. 442%		

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300	15. 010	14. 997	15. 025	HH	10054	161606	21. 85%	0. 646%	
301	15. 059	15. 025	15. 114	HH	19079	659146	89. 12%	2. 633%	
302	15. 131	15. 114	15. 137	HH	10593	146137	19. 76%	0. 584%	
303	15. 153	15. 137	15. 170	HH	11422	214287	28. 97%	0. 856%	
304	15. 201	15. 170	15. 221	HH	31434	579102	78. 30%	2. 314%	
305	15. 241	15. 221	15. 279	HH	29930	616462	83. 35%	2. 463%	
306	15. 295	15. 279	15. 320	HH	11634	276254	37. 35%	1. 104%	
307	15. 364	15. 320	15. 392	HH	15325	543128	73. 44%	2. 170%	
308	15. 395	15. 392	15. 397	HH	12148	36925	4. 99%	0. 148%	
309	15. 426	15. 397	15. 430	HH	12657	241061	32. 59%	0. 963%	
310	15. 443	15. 430	15. 479	HH	13402	366504	49. 55%	1. 464%	
311	15. 507	15. 479	15. 530	HH	14607	406469	54. 96%	1. 624%	
312	15. 553	15. 530	15. 610	HH	14045	632148	85. 47%	2. 525%	
313	15. 644	15. 610	15. 676	HH	17812	588497	79. 57%	2. 351%	
314	15. 680	15. 676	15. 706	HH	14242	254461	34. 41%	1. 017%	
315	15. 722	15. 706	15. 733	HH	13810	226773	30. 66%	0. 906%	
316	15. 753	15. 733	15. 759	HH	14166	221078	29. 89%	0. 883%	
317	15. 801	15. 759	15. 821	HH	17143	575894	77. 87%	2. 301%	
318	15. 838	15. 821	15. 857	HH	15817	332730	44. 99%	1. 329%	
319	15. 878	15. 857	15. 897	HH	19456	413731	55. 94%	1. 653%	
320	15. 920	15. 897	15. 948	HH	17415	502921	68. 00%	2. 009%	
321	15. 982	15. 948	15. 999	HH	16903	497895	67. 32%	1. 989%	
					Sum of corrected areas:	25031157			

FG011325. M Sat Feb 01 02:28:07 2025

## Report of Analysis

Client:	RU2 Engineering, LLC			Date Collected:	01/29/25	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR			Date Received:	01/30/25	
Client Sample ID:	JPP-42.1-012925			SDG No.:	Q1232	
Lab Sample ID:	Q1232-09			Matrix:	SOIL	
Analytical Method:	8015D DRO			% Solid:	88.6	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
FG015286.D	10	01/31/25 08:50	01/31/25 19:08	PB166415

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
<b>TARGETS</b>						
DRO	DRO	116000		2090		18800 ug/kg
<b>SURROGATES</b>						
16416-32-3	Tetracosane-d50	1.38		37 - 130		69% 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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG013125\  
Data File : FG015286.D  
Signal(s) : FID1A.ch  
Acq On : 31 Jan 2025 19:08  
Operator : YP\AJ  
Sample : Q1232-09 10X  
Misc :  
ALS Vial : 23 Sample Multiplier: 1

Instrument :  
FID\_G  
ClientSampleId :  
JPP-42.1-012925

Integration File: autoint1.e  
Quant Time: Feb 01 01:17:41 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 : Rx1-1ms  
Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

9) S TETRACOSANE-d50 (SURR...	15.060	177575	1.384 ug/ml
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Target Compounds

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(f)=RT Delta > 1/2 Window

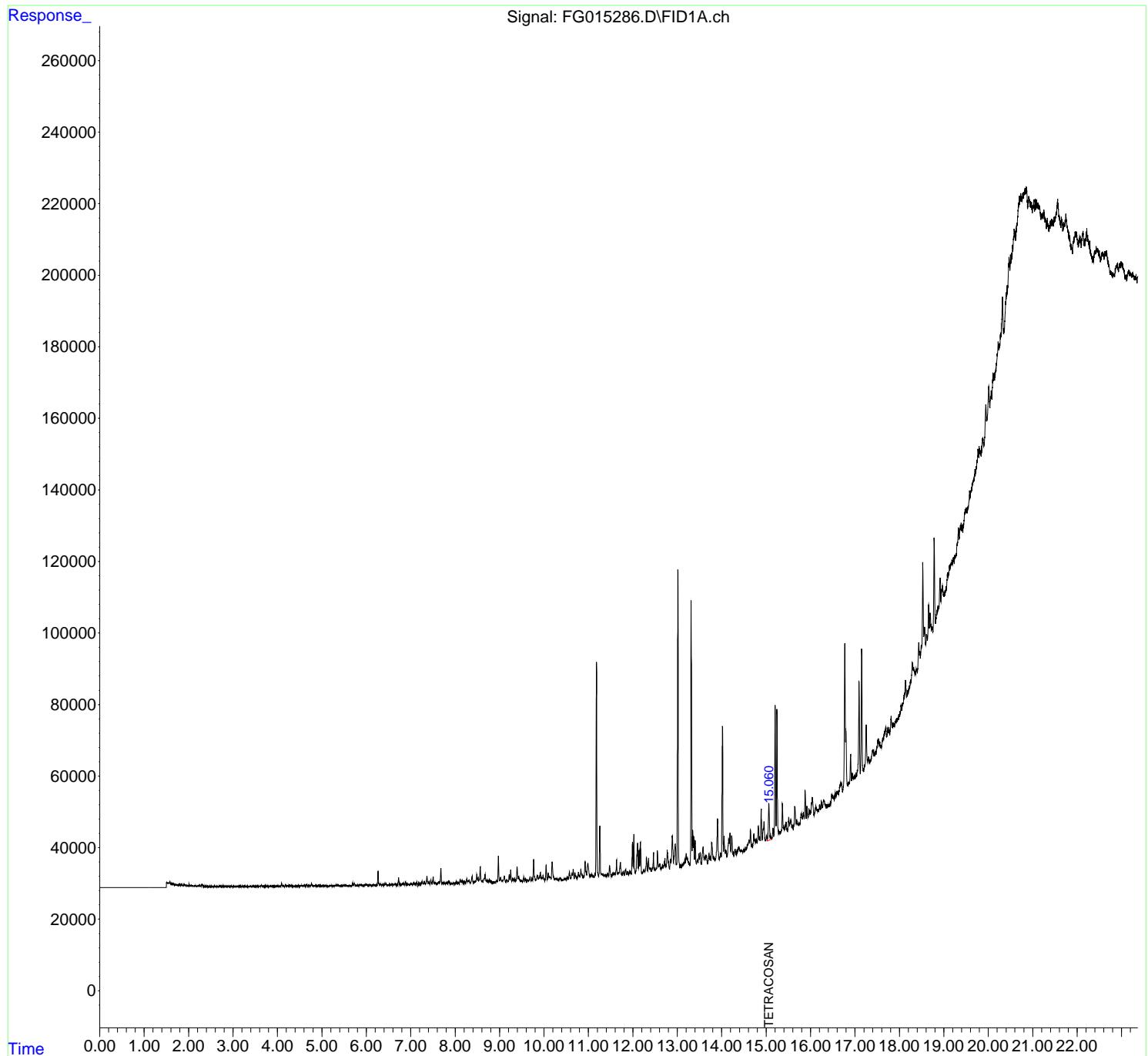
(m)=manual int.

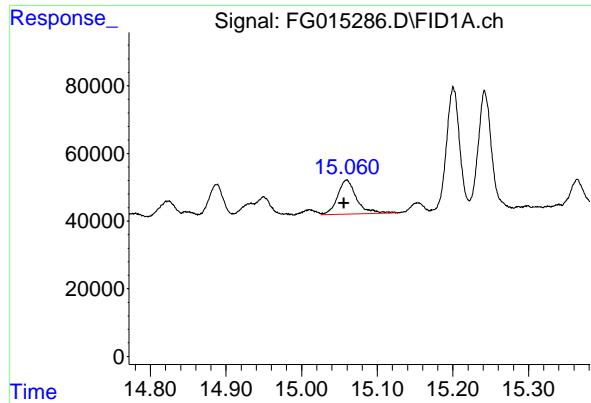
Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG013125\  
Data File : FG015286.D  
Signal(s) : FID1A.ch  
Acq On : 31 Jan 2025 19:08  
Operator : YP\AJ  
Sample : Q1232-09 10X  
Misc :  
ALS Vial : 23 Sample Multiplier: 1

Instrument :  
FID\_G  
ClientSampleId :  
JPP-42.1-012925

Integration File: autoint1.e  
Quant Time: Feb 01 01:17:41 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 : Rx1-1ms  
Signal Info : 20mx0.18mmx0.18um





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 15.060 min  
Delta R.T.: 0.004 min  
Instrument:  
Response: 177575  
Conc: 1.38 ug/ml  
ClientSampleId :  
JPP-42.1-012925

## rteres

## Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG013125\  
 Data File : FG015286.D  
 Signal (s) : FID1A.ch  
 Acq On : 31 Jan 2025 19:08  
 Sample : Q1232-09 10X  
 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	4.380	4.350	4.386	BH	26	-423	-0.03%	-0.001%
2	4.391	4.386	4.398	PH	0	-231	-0.02%	-0.001%
3	4.404	4.398	4.414	PH	81	-55	-0.00%	-0.000%
4	4.418	4.414	4.427	PH	26	-145	-0.01%	-0.000%
5	4.437	4.427	4.448	PH	-5	-349	-0.02%	-0.001%
6	4.472	4.448	4.512	PH	56	-865	-0.06%	-0.002%
7	4.520	4.512	4.529	PH	10	-238	-0.02%	-0.001%
8	4.549	4.529	4.558	PH	231	2358	0.15%	0.005%
9	4.564	4.558	4.574	HH	143	921	0.06%	0.002%
10	4.580	4.574	4.602	HH	119	1113	0.07%	0.003%
11	4.613	4.602	4.618	PH	143	476	0.03%	0.001%
12	4.623	4.618	4.634	PH	107	368	0.02%	0.001%
13	4.659	4.634	4.689	PH	441	4612	0.30%	0.011%
14	4.716	4.689	4.730	PH	348	3214	0.21%	0.007%
15	4.734	4.730	4.739	PH	57	94	0.01%	0.000%
16	4.767	4.739	4.794	PH	782	9222	0.60%	0.021%
17	4.796	4.794	4.815	HH	132	627	0.04%	0.001%
18	4.831	4.815	4.852	PH	130	1095	0.07%	0.003%
19	4.919	4.852	4.938	HH	195	3784	0.25%	0.009%
20	4.948	4.938	4.952	HH	112	978	0.06%	0.002%
21	4.963	4.952	4.988	HH	208	2109	0.14%	0.005%
22	5.011	4.988	5.039	PH	163	2354	0.15%	0.005%
23	5.058	5.039	5.125	PH	170	2297	0.15%	0.005%
24	5.131	5.125	5.150	PH	72	346	0.02%	0.001%
25	5.177	5.150	5.192	PH	135	1650	0.11%	0.004%
26	5.227	5.192	5.242	HH	155	1815	0.12%	0.004%
27	5.257	5.242	5.275	HH	156	1603	0.10%	0.004%
28	5.308	5.275	5.352	HH	260	7727	0.51%	0.018%
29	5.367	5.352	5.400	HH	257	3809	0.25%	0.009%
30	5.438	5.400	5.459	HH	116	2228	0.15%	0.005%
31	5.468	5.459	5.480	HH	137	1461	0.10%	0.003%
32	5.496	5.480	5.524	HH	335	4584	0.30%	0.011%
33	5.536	5.524	5.557	HH	244	3009	0.20%	0.007%
34	5.566	5.557	5.594	HH	158	2132	0.14%	0.005%
35	5.630	5.594	5.655	HH	164	3252	0.21%	0.007%
36	5.692	5.655	5.715	HH	801	11663	0.76%	0.027%

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37	5. 731	5. 715	5. 797	HH	806	13625	0. 89%	0. 031%
38	5. 806	5. 797	5. 829	HH	182	2786	0. 18%	0. 006%
39	5. 853	5. 829	5. 865	HH	426	5473	0. 36%	0. 013%
40	5. 879	5. 865	5. 909	HH	389	6914	0. 45%	0. 016%
41	5. 958	5. 909	5. 972	HH	294	6682	0. 44%	0. 015%
42	6. 003	5. 972	6. 039	HH	424	12866	0. 84%	0. 030%
43	6. 081	6. 039	6. 125	HH	377	12154	0. 80%	0. 028%
44	6. 137	6. 125	6. 145	HH	245	2240	0. 15%	0. 005%
45	6. 169	6. 145	6. 192	HH	440	7872	0. 52%	0. 018%
46	6. 228	6. 192	6. 242	HH	411	7812	0. 51%	0. 018%
47	6. 266	6. 242	6. 304	HH	4300	52469	3. 43%	0. 120%
48	6. 323	6. 304	6. 347	HH	554	10223	0. 67%	0. 023%
49	6. 371	6. 347	6. 396	HH	594	9864	0. 65%	0. 023%
50	6. 437	6. 396	6. 479	HH	690	20839	1. 36%	0. 048%
51	6. 497	6. 479	6. 508	HH	383	5331	0. 35%	0. 012%
52	6. 525	6. 508	6. 537	HH	384	6008	0. 39%	0. 014%
53	6. 567	6. 537	6. 587	HH	492	11979	0. 78%	0. 027%
54	6. 599	6. 587	6. 625	HH	418	9020	0. 59%	0. 021%
55	6. 650	6. 625	6. 687	HH	644	16662	1. 09%	0. 038%
56	6. 729	6. 687	6. 775	HH	2324	40844	2. 67%	0. 094%
57	6. 810	6. 775	6. 839	HH	716	19570	1. 28%	0. 045%
58	6. 848	6. 839	6. 865	HH	562	8441	0. 55%	0. 019%
59	6. 882	6. 865	6. 912	HH	1202	20353	1. 33%	0. 047%
60	6. 922	6. 912	6. 944	HH	568	9719	0. 64%	0. 022%
61	6. 957	6. 944	6. 983	HH	550	10590	0. 69%	0. 024%
62	7. 014	6. 983	7. 035	HH	801	16430	1. 08%	0. 038%
63	7. 059	7. 035	7. 085	HH	871	18974	1. 24%	0. 044%
64	7. 093	7. 085	7. 115	HH	555	8760	0. 57%	0. 020%
65	7. 137	7. 115	7. 162	HH	992	19356	1. 27%	0. 044%
66	7. 190	7. 162	7. 218	HH	658	18661	1. 22%	0. 043%
67	7. 263	7. 218	7. 289	HH	1186	35150	2. 30%	0. 081%
68	7. 306	7. 289	7. 330	HH	1393	22741	1. 49%	0. 052%
69	7. 367	7. 330	7. 393	HH	2748	52304	3. 42%	0. 120%
70	7. 409	7. 393	7. 431	HH	1231	21501	1. 41%	0. 049%
71	7. 453	7. 431	7. 489	HH	1820	34930	2. 29%	0. 080%
72	7. 506	7. 489	7. 539	HH	2551	38545	2. 52%	0. 088%
73	7. 553	7. 539	7. 572	HH	1004	16499	1. 08%	0. 038%
74	7. 601	7. 572	7. 610	HH	795	16789	1. 10%	0. 038%
75	7. 626	7. 610	7. 637	HH	969	14098	0. 92%	0. 032%
76	7. 680	7. 637	7. 705	HH	4995	81167	5. 31%	0. 186%
77	7. 720	7. 705	7. 760	HH	975	27785	1. 82%	0. 064%
78	7. 768	7. 760	7. 782	HH	808	10240	0. 67%	0. 023%
79	7. 805	7. 782	7. 823	HH	910	20072	1. 31%	0. 046%
80	7. 855	7. 823	7. 900	HH	1459	45625	2. 99%	0. 105%
81	7. 907	7. 900	7. 930	HH	809	12424	0. 81%	0. 028%
82	7. 945	7. 930	7. 964	HH	808	14136	0. 92%	0. 032%
83	7. 971	7. 964	7. 987	HH	750	10267	0. 67%	0. 024%
84	7. 998	7. 987	8. 007	HH	951	10521	0. 69%	0. 024%
85	8. 022	8. 007	8. 039	HH	1096	17329	1. 13%	0. 040%
86	8. 053	8. 039	8. 086	HH	926	23148	1. 51%	0. 053%
87	8. 113	8. 086	8. 130	HH	1893	32347	2. 12%	0. 074%
88	8. 144	8. 130	8. 157	HH	1408	20107	1. 32%	0. 046%
89	8. 167	8. 157	8. 192	HH	1288	23274	1. 52%	0. 053%

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90	8. 211	8. 192	8. 229	HH	1400	24210	1. 58%	0. 056%	
91	8. 263	8. 229	8. 284	HH	1894	45520	2. 98%	0. 104%	
92	8. 296	8. 284	8. 304	HH	1486	16110	1. 05%	0. 037%	
93	8. 315	8. 304	8. 346	HH	1672	31374	2. 05%	0. 072%	
94	8. 384	8. 346	8. 424	HH	2783	72229	4. 73%	0. 166%	
95	8. 452	8. 424	8. 464	HH	1322	28559	1. 87%	0. 065%	
96	8. 489	8. 464	8. 507	HH	3227	55180	3. 61%	0. 127%	
97	8. 518	8. 507	8. 535	HH	2396	32100	2. 10%	0. 074%	
98	8. 566	8. 535	8. 597	HH	5416	98924	6. 47%	0. 227%	
99	8. 608	8. 597	8. 627	HH	1424	23976	1. 57%	0. 055%	
100	8. 675	8. 627	8. 709	HH	3300	96973	6. 35%	0. 222%	
101	8. 726	8. 709	8. 745	HH	1536	30187	1. 98%	0. 069%	
102	8. 767	8. 745	8. 780	HH	1743	29408	1. 92%	0. 067%	
103	8. 791	8. 780	8. 832	HH	1405	38421	2. 51%	0. 088%	
104	8. 856	8. 832	8. 885	HH	1153	33059	2. 16%	0. 076%	
105	8. 899	8. 885	8. 907	HH	1086	13177	0. 86%	0. 030%	
106	8. 929	8. 907	8. 952	HH	1497	35240	2. 31%	0. 081%	
107	8. 975	8. 952	9. 005	HH	8393	116051	7. 59%	0. 266%	
108	9. 022	9. 005	9. 049	HH	2373	48489	3. 17%	0. 111%	
109	9. 062	9. 049	9. 079	HH	1692	27937	1. 83%	0. 064%	
110	9. 109	9. 079	9. 137	HH	2762	67137	4. 39%	0. 154%	
111	9. 162	9. 137	9. 195	HH	1674	51045	3. 34%	0. 117%	
112	9. 219	9. 195	9. 235	HH	3178	52455	3. 43%	0. 120%	
113	9. 252	9. 235	9. 277	HH	4541	67618	4. 42%	0. 155%	
114	9. 294	9. 277	9. 323	HH	2083	48540	3. 18%	0. 111%	
115	9. 342	9. 323	9. 367	HH	1950	44708	2. 93%	0. 103%	
116	9. 396	9. 367	9. 419	HH	5432	96530	6. 32%	0. 221%	
117	9. 432	9. 419	9. 466	HH	2742	57528	3. 76%	0. 132%	
118	9. 484	9. 466	9. 511	HH	1648	39812	2. 61%	0. 091%	
119	9. 548	9. 511	9. 566	HH	2426	56069	3. 67%	0. 129%	
120	9. 581	9. 566	9. 613	HH	2205	47592	3. 11%	0. 109%	
121	9. 633	9. 613	9. 652	HH	1783	36767	2. 41%	0. 084%	
122	9. 686	9. 652	9. 709	HH	2579	63442	4. 15%	0. 145%	
123	9. 729	9. 709	9. 745	HH	2114	39959	2. 61%	0. 092%	
124	9. 769	9. 745	9. 812	HH	7476	137768	9. 01%	0. 316%	
125	9. 849	9. 812	9. 879	HH	3051	90897	5. 95%	0. 208%	
126	9. 892	9. 879	9. 900	HH	2515	29911	1. 96%	0. 069%	
127	9. 920	9. 900	9. 941	HH	3865	71295	4. 67%	0. 163%	
128	9. 952	9. 941	9. 963	HH	2445	30389	1. 99%	0. 070%	
129	9. 980	9. 963	10. 024	HH	3015	80056	5. 24%	0. 184%	
130	10. 050	10. 024	10. 074	HH	5998	97316	6. 37%	0. 223%	
131	10. 095	10. 074	10. 162	HH	3607	136727	8. 95%	0. 314%	
132	10. 184	10. 162	10. 239	HH	6794	165784	10. 85%	0. 380%	
133	10. 256	10. 239	10. 277	HH	2182	46327	3. 03%	0. 106%	
134	10. 290	10. 277	10. 319	HH	2290	48595	3. 18%	0. 111%	
135	10. 362	10. 319	10. 422	HH	2289	115521	7. 56%	0. 265%	
136	10. 458	10. 422	10. 477	HH	2091	60709	3. 97%	0. 139%	
137	10. 523	10. 477	10. 552	HH	2633	94781	6. 20%	0. 217%	
138	10. 573	10. 552	10. 600	HH	4006	86312	5. 65%	0. 198%	
139	10. 630	10. 600	10. 642	HH	3429	69544	4. 55%	0. 159%	
140	10. 659	10. 642	10. 682	HH	4639	84434	5. 52%	0. 194%	
141	10. 700	10. 682	10. 748	HH	3742	106900	6. 99%	0. 245%	

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142	10. 777	10. 748	10. 812	HH	3938	112250	7. 34%	0. 257%	
143	10. 831	10. 812	10. 892	HH	4735	153134	10. 02%	0. 351%	
144	10. 926	10. 892	10. 961	HH	6869	174872	11. 44%	0. 401%	
145	10. 988	10. 961	11. 037	HH	6258	199095	13. 03%	0. 457%	
146	11. 054	11. 037	11. 069	HH	3096	55923	3. 66%	0. 128%	
147	11. 080	11. 069	11. 097	HH	3334	50729	3. 32%	0. 116%	
148	11. 114	11. 097	11. 131	HH	2799	55005	3. 60%	0. 126%	
149	11. 148	11. 131	11. 157	HH	3488	47601	3. 11%	0. 109%	
150	11. 182	11. 157	11. 229	HH	62451	742520	48. 59%	1. 703%	
151	11. 258	11. 229	11. 304	HH	16901	292000	19. 11%	0. 670%	
152	11. 318	11. 304	11. 342	HH	3397	73580	4. 81%	0. 169%	
153	11. 346	11. 342	11. 368	HH	2991	46241	3. 03%	0. 106%	
154	11. 382	11. 368	11. 420	HH	3058	90468	5. 92%	0. 207%	
155	11. 434	11. 420	11. 455	HH	3476	66012	4. 32%	0. 151%	
156	11. 477	11. 455	11. 519	HH	5654	146617	9. 59%	0. 336%	
157	11. 580	11. 519	11. 602	HH	3657	164124	10. 74%	0. 376%	
158	11. 633	11. 602	11. 665	HH	7444	172127	11. 26%	0. 395%	
159	11. 679	11. 665	11. 687	HH	3755	47286	3. 09%	0. 108%	
160	11. 720	11. 687	11. 758	HH	6554	195648	12. 80%	0. 449%	
161	11. 787	11. 758	11. 809	HH	4143	107317	7. 02%	0. 246%	
162	11. 838	11. 809	11. 859	HH	4718	115815	7. 58%	0. 266%	
163	11. 881	11. 859	11. 902	HH	4147	93563	6. 12%	0. 215%	
164	11. 944	11. 902	11. 964	HH	4175	138076	9. 03%	0. 317%	
165	11. 991	11. 964	12. 006	HH	12264	187609	12. 28%	0. 430%	
166	12. 022	12. 006	12. 057	HH	14557	235929	15. 44%	0. 541%	
167	12. 105	12. 057	12. 123	HH	12032	283880	18. 58%	0. 651%	
168	12. 140	12. 123	12. 154	HH	10058	138096	9. 04%	0. 317%	
169	12. 171	12. 154	12. 200	HH	12205	208481	13. 64%	0. 478%	
170	12. 244	12. 200	12. 267	HH	4425	160170	10. 48%	0. 367%	
171	12. 307	12. 267	12. 334	HH	8003	217257	14. 22%	0. 498%	
172	12. 353	12. 334	12. 373	HH	7856	138675	9. 07%	0. 318%	
173	12. 386	12. 373	12. 420	HH	4993	131915	8. 63%	0. 302%	
174	12. 464	12. 420	12. 487	HH	9362	236317	15. 46%	0. 542%	
175	12. 497	12. 487	12. 514	HH	4779	73880	4. 83%	0. 169%	
176	12. 554	12. 514	12. 579	HH	9867	244116	15. 97%	0. 560%	
177	12. 609	12. 579	12. 629	HH	6242	170341	11. 15%	0. 391%	
178	12. 667	12. 629	12. 687	HH	5990	185543	12. 14%	0. 425%	
179	12. 716	12. 687	12. 750	HH	7054	228373	14. 94%	0. 524%	
180	12. 775	12. 750	12. 827	HH	10086	323598	21. 17%	0. 742%	
181	12. 848	12. 827	12. 860	HH	7676	128908	8. 43%	0. 296%	
182	12. 888	12. 860	12. 916	HH	13963	345095	22. 58%	0. 791%	
183	12. 954	12. 916	12. 980	HH	11692	332160	21. 73%	0. 762%	
184	13. 013	12. 980	13. 060	HH	88625	1180236	77. 23%	2. 706%	
185	13. 074	13. 060	13. 092	HH	5940	104408	6. 83%	0. 239%	
186	13. 113	13. 092	13. 127	HH	5923	122455	8. 01%	0. 281%	
187	13. 147	13. 127	13. 159	HH	6686	119827	7. 84%	0. 275%	
188	13. 173	13. 159	13. 185	HH	7443	110621	7. 24%	0. 254%	
189	13. 201	13. 185	13. 215	HH	8925	142700	9. 34%	0. 327%	
190	13. 225	13. 215	13. 287	HH	7886	289961	18. 97%	0. 665%	
191	13. 314	13. 287	13. 334	HH	79695	972173	63. 61%	2. 229%	
192	13. 346	13. 334	13. 359	HH	15541	197593	12. 93%	0. 453%	
193	13. 369	13. 359	13. 385	HH	13897	177375	11. 61%	0. 407%	
194	13. 401	13. 385	13. 430	HH	12718	244267	15. 98%	0. 560%	

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195	13. 453	13. 430	13. 469	HH	7324	160273	10. 49%	0. 368%	
196	13. 487	13. 469	13. 499	HH	9046	140178	9. 17%	0. 321%	
197	13. 514	13. 499	13. 540	HH	9333	194331	12. 72%	0. 446%	
198	13. 581	13. 540	13. 604	HH	10789	329585	21. 57%	0. 756%	
199	13. 621	13. 604	13. 633	HH	8146	137878	9. 02%	0. 316%	
200	13. 650	13. 633	13. 680	HH	8614	216547	14. 17%	0. 497%	
201	13. 713	13. 680	13. 729	HH	8917	226153	14. 80%	0. 519%	
202	13. 738	13. 729	13. 752	HH	7931	109124	7. 14%	0. 250%	
203	13. 777	13. 752	13. 831	HH	12282	430929	28. 20%	0. 988%	
204	13. 843	13. 831	13. 859	HH	7634	123689	8. 09%	0. 284%	
205	13. 905	13. 859	13. 940	HH	18880	546061	35. 73%	1. 252%	
206	13. 974	13. 940	13. 990	HH	9229	253126	16. 56%	0. 580%	
207	14. 017	13. 990	14. 040	HH	44683	695430	45. 50%	1. 595%	
208	14. 054	14. 040	14. 079	HH	13961	262649	17. 19%	0. 602%	
209	14. 095	14. 079	14. 121	HH	10010	234237	15. 33%	0. 537%	
210	14. 158	14. 121	14. 168	HH	12631	308407	20. 18%	0. 707%	
211	14. 183	14. 168	14. 207	HH	14928	284834	18. 64%	0. 653%	
212	14. 225	14. 207	14. 266	HH	14031	382960	25. 06%	0. 878%	
213	14. 301	14. 266	14. 324	HH	10336	325949	21. 33%	0. 747%	
214	14. 385	14. 324	14. 415	HH	10837	544732	35. 64%	1. 249%	
215	14. 422	14. 415	14. 439	HH	9982	138523	9. 06%	0. 318%	
216	14. 444	14. 439	14. 472	HH	9928	195732	12. 81%	0. 449%	
217	14. 493	14. 472	14. 504	HH	10208	188767	12. 35%	0. 433%	
218	14. 547	14. 504	14. 559	HH	10843	336954	22. 05%	0. 773%	
219	14. 614	14. 559	14. 627	HH	12930	483987	31. 67%	1. 110%	
220	14. 647	14. 627	14. 677	HH	15745	389097	25. 46%	0. 892%	
221	14. 749	14. 740	14. 767	HH	13003	202265	13. 23%	0. 464%	
222	14. 779	14. 767	14. 797	HH	12958	227175	14. 86%	0. 521%	
223	14. 887	14. 865	14. 910	HH	21574	451517	29. 54%	1. 035%	
224	14. 950	14. 910	14. 990	HH	18064	708593	46. 37%	1. 625%	
225	15. 010	14. 990	15. 029	HH	14154	309411	20. 25%	0. 710%	
226	15. 059	15. 029	15. 127	HH	22906	937898	61. 37%	2. 151%	
227	15. 153	15. 127	15. 170	HH	16157	380658	24. 91%	0. 873%	
228	15. 201	15. 170	15. 222	HH	50431	862990	56. 47%	1. 979%	
229	15. 242	15. 222	15. 280	HH	49234	925767	60. 58%	2. 123%	
230	15. 298	15. 280	15. 318	HH	15292	345654	22. 62%	0. 793%	
231	15. 364	15. 318	15. 414	HH	23105	981824	64. 24%	2. 251%	
232	15. 447	15. 414	15. 479	HH	17973	646811	42. 32%	1. 483%	
233	15. 507	15. 479	15. 525	HH	19117	482855	31. 59%	1. 107%	
234	15. 557	15. 525	15. 604	HH	18189	816213	53. 41%	1. 872%	
235	15. 645	15. 604	15. 675	HH	22210	801106	52. 42%	1. 837%	
236	15. 688	15. 675	15. 724	HH	18409	514415	33. 66%	1. 180%	
237	15. 789	15. 724	15. 817	HH	20249	1033107	67. 60%	2. 369%	
238	15. 837	15. 817	15. 854	HH	20636	436182	28. 54%	1. 000%	
239	15. 877	15. 854	15. 899	HH	26602	599976	39. 26%	1. 376%	
240	15. 916	15. 899	15. 944	HH	22277	556389	36. 41%	1. 276%	
241	15. 964	15. 944	15. 993	HH	21493	599696	39. 24%	1. 375%	
242	16. 040	15. 993	16. 079	HH	24676	1139561	74. 57%	2. 613%	
243	16. 116	16. 079	16. 155	HH	22426	977981	63. 99%	2. 243%	
244	16. 162	16. 155	16. 180	HH	21309	311335	20. 37%	0. 714%	
245	16. 202	16. 180	16. 220	HH	22687	528382	34. 57%	1. 212%	
246	16. 242	16. 220	16. 268	HH	23702	651771	42. 65%	1. 495%	

						rteres				
247	16. 292	16. 268	16. 344	HH	23855	1047618	68. 55%	2. 402%		
248	16. 347	16. 344	16. 365	HH	22606	289732	18. 96%	0. 664%		
249	16. 379	16. 365	16. 402	HH	22554	493380	32. 28%	1. 131%		
250	16. 413	16. 402	16. 427	HH	22617	340131	22. 26%	0. 780%		
251	16. 479	16. 427	16. 532	HH	25499	1528264	100. 00%	3. 505%		
252	16. 554	16. 532	16. 569	HH	26056	555895	36. 37%	1. 275%		
					Sum of corrected areas:	43608347				

FG011325. M Sat Feb 01 02:31:29 2025

## Report of Analysis

Client:	RU2 Engineering, LLC			Date Collected:	01/29/25	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR			Date Received:	01/30/25	
Client Sample ID:	JPP-42.2-012925			SDG No.:	Q1232	
Lab Sample ID:	Q1232-13			Matrix:	SOIL	
Analytical Method:	8015D DRO			% Solid:	92.1	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
FG015287.D	10	01/31/25 08:50	01/31/25 19:36	PB166415

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
<b>TARGETS</b>						
DRO	DRO	135000		2010		18100 ug/kg
<b>SURROGATES</b>						
16416-32-3	Tetracosane-d50	1.84		37 - 130		92% 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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG013125\  
Data File : FG015287.D  
Signal(s) : FID1A.ch  
Acq On : 31 Jan 2025 19:36  
Operator : YP\AJ  
Sample : Q1232-13 10X  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
FID\_G  
ClientSampleId :  
JPP-42.2-012925

Integration File: autoint1.e  
Quant Time: Feb 01 01:18:03 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 : Rx1-1ms  
Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

9) S TETRACOSANE-d50 (SURR...	15.059	236011	1.840 ug/ml
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Target Compounds

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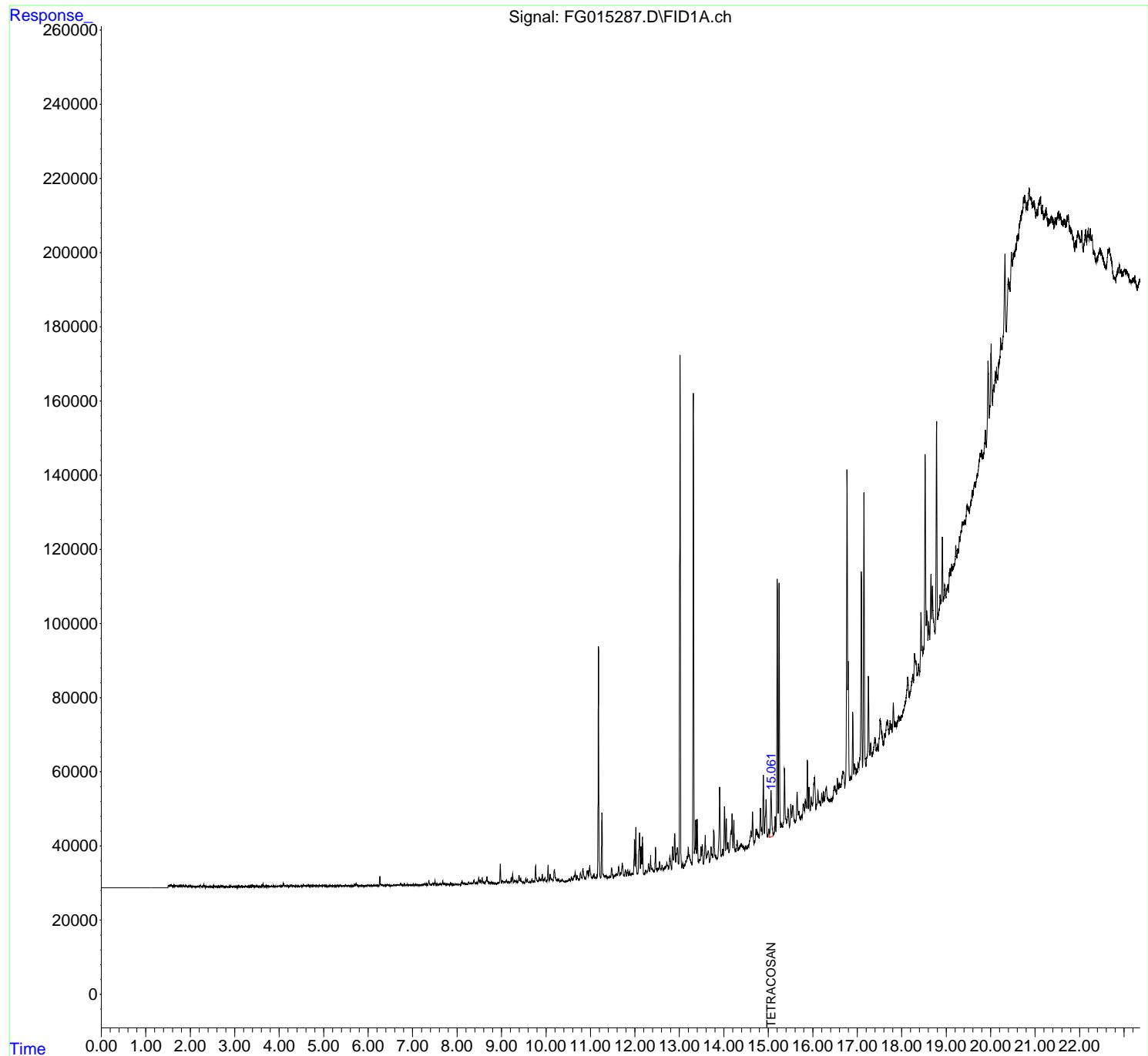
(f)=RT Delta > 1/2 Window (m)=manual int.

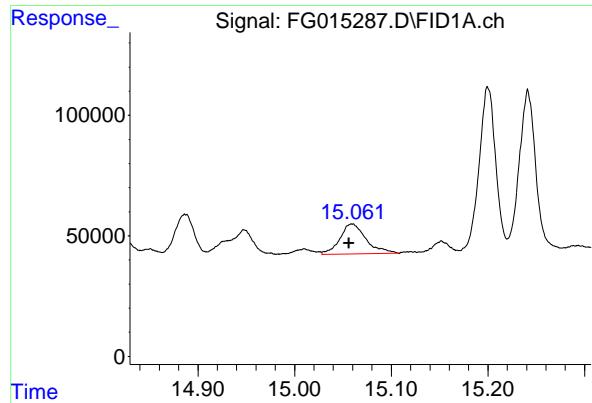
Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG013125\  
Data File : FG015287.D  
Signal(s) : FID1A.ch  
Acq On : 31 Jan 2025 19:36  
Operator : YP\AJ  
Sample : Q1232-13 10X  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
FID\_G  
ClientSampleId :  
JPP-42.2-012925

Integration File: autoint1.e  
Quant Time: Feb 01 01:18:03 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 : Rx1-1ms  
Signal Info : 20mx0.18mmx0.18um





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 15.059 min  
Delta R.T.: 0.003 min  
Instrument:  
Response: 236011 FID\_G  
Conc: 1.84 ug/ml  
ClientSampleId :  
JPP-42.2-012925

## rteres

## Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG013125\  
 Data File : FG015287.D  
 Signal (s) : FID1A.ch  
 Acq On : 31 Jan 2025 19:36  
 Sample : Q1232-13 10X  
 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	4.361	4.350	4.392	BH	129	1496	0.07%	0.003%
2	4.397	4.392	4.402	HH	80	287	0.01%	0.001%
3	4.408	4.402	4.416	HH	83	482	0.02%	0.001%
4	4.427	4.416	4.440	HH	106	849	0.04%	0.002%
5	4.443	4.440	4.449	HH	82	236	0.01%	0.000%
6	4.454	4.449	4.458	PH	50	132	0.01%	0.000%
7	4.471	4.458	4.476	PH	68	326	0.01%	0.001%
8	4.488	4.476	4.493	PH	109	710	0.03%	0.001%
9	4.500	4.493	4.517	HH	117	938	0.04%	0.002%
10	4.522	4.517	4.526	PH	90	348	0.02%	0.001%
11	4.544	4.526	4.564	HH	400	4522	0.20%	0.009%
12	4.573	4.564	4.612	HH	185	3517	0.15%	0.007%
13	4.623	4.612	4.627	HH	149	1139	0.05%	0.002%
14	4.632	4.627	4.638	HH	180	646	0.03%	0.001%
15	4.656	4.638	4.680	HH	230	4112	0.18%	0.008%
16	4.715	4.680	4.738	HH	349	5000	0.22%	0.009%
17	4.772	4.738	4.811	HH	287	6441	0.28%	0.012%
18	4.813	4.811	4.818	HH	118	453	0.02%	0.001%
19	4.831	4.818	4.851	HH	239	3020	0.13%	0.006%
20	4.860	4.851	4.867	HH	182	1356	0.06%	0.003%
21	4.870	4.867	4.876	HH	165	657	0.03%	0.001%
22	4.880	4.876	4.898	HH	152	1419	0.06%	0.003%
23	4.900	4.898	4.905	HH	139	563	0.02%	0.001%
24	4.924	4.905	4.931	HH	244	2462	0.11%	0.005%
25	4.935	4.931	4.952	HH	229	2147	0.09%	0.004%
26	4.970	4.952	4.978	HH	249	2614	0.11%	0.005%
27	4.985	4.978	4.989	HH	195	975	0.04%	0.002%
28	4.999	4.989	5.007	HH	204	1836	0.08%	0.003%
29	5.012	5.007	5.033	HH	223	2289	0.10%	0.004%
30	5.048	5.033	5.057	HH	232	2304	0.10%	0.004%
31	5.060	5.057	5.076	HH	202	1753	0.08%	0.003%
32	5.080	5.076	5.100	HH	188	1326	0.06%	0.003%
33	5.106	5.100	5.110	HH	124	579	0.03%	0.001%
34	5.113	5.110	5.119	HH	91	423	0.02%	0.001%
35	5.128	5.119	5.132	HH	142	630	0.03%	0.001%
36	5.136	5.132	5.143	HH	173	509	0.02%	0.001%

					rteres			
37	5. 146	5. 143	5. 154	HH	150	604	0. 03%	0. 001%
38	5. 170	5. 154	5. 197	HH	189	2756	0. 12%	0. 005%
39	5. 204	5. 197	5. 208	HH	146	731	0. 03%	0. 001%
40	5. 215	5. 208	5. 232	HH	170	1990	0. 09%	0. 004%
41	5. 237	5. 232	5. 245	HH	125	661	0. 03%	0. 001%
42	5. 261	5. 245	5. 285	HH	145	2335	0. 10%	0. 004%
43	5. 303	5. 285	5. 328	HH	271	3664	0. 16%	0. 007%
44	5. 334	5. 328	5. 345	HH	166	1274	0. 06%	0. 002%
45	5. 372	5. 345	5. 389	HH	307	4442	0. 19%	0. 008%
46	5. 398	5. 389	5. 402	HH	128	663	0. 03%	0. 001%
47	5. 406	5. 402	5. 416	HH	108	602	0. 03%	0. 001%
48	5. 435	5. 416	5. 453	PH	178	2203	0. 10%	0. 004%
49	5. 495	5. 453	5. 512	HH	333	5416	0. 24%	0. 010%
50	5. 516	5. 512	5. 525	HH	172	1060	0. 05%	0. 002%
51	5. 534	5. 525	5. 552	HH	216	2253	0. 10%	0. 004%
52	5. 568	5. 552	5. 582	HH	179	2140	0. 09%	0. 004%
53	5. 589	5. 582	5. 599	HH	155	1042	0. 05%	0. 002%
54	5. 602	5. 599	5. 613	HH	122	700	0. 03%	0. 001%
55	5. 627	5. 613	5. 653	HH	254	3081	0. 13%	0. 006%
56	5. 659	5. 653	5. 668	HH	72	604	0. 03%	0. 001%
57	5. 691	5. 668	5. 718	HH	710	9675	0. 42%	0. 018%
58	5. 732	5. 718	5. 786	HH	694	12010	0. 52%	0. 023%
59	5. 806	5. 786	5. 833	HH	263	4285	0. 19%	0. 008%
60	5. 839	5. 833	5. 861	HH	189	2462	0. 11%	0. 005%
61	5. 874	5. 861	5. 895	HH	251	4016	0. 17%	0. 008%
62	5. 900	5. 895	5. 918	HH	200	1623	0. 07%	0. 003%
63	5. 923	5. 918	5. 929	HH	159	839	0. 04%	0. 002%
64	5. 935	5. 929	5. 941	HH	180	1040	0. 05%	0. 002%
65	5. 955	5. 941	5. 970	HH	228	3167	0. 14%	0. 006%
66	6. 002	5. 970	6. 016	HH	327	6655	0. 29%	0. 013%
67	6. 020	6. 016	6. 052	HH	231	3600	0. 16%	0. 007%
68	6. 063	6. 052	6. 098	HH	285	4555	0. 20%	0. 009%
69	6. 108	6. 098	6. 122	HH	181	1982	0. 09%	0. 004%
70	6. 129	6. 122	6. 134	HH	179	1144	0. 05%	0. 002%
71	6. 136	6. 134	6. 140	HH	240	548	0. 02%	0. 001%
72	6. 153	6. 140	6. 157	HH	178	1421	0. 06%	0. 003%
73	6. 169	6. 157	6. 197	HH	286	4589	0. 20%	0. 009%
74	6. 205	6. 197	6. 214	HH	248	1722	0. 08%	0. 003%
75	6. 227	6. 214	6. 243	HH	305	3921	0. 17%	0. 007%
76	6. 265	6. 243	6. 299	HH	2757	32587	1. 42%	0. 062%
77	6. 303	6. 299	6. 308	HH	312	1622	0. 07%	0. 003%
78	6. 315	6. 308	6. 350	HH	368	6637	0. 29%	0. 013%
79	6. 353	6. 350	6. 356	HH	189	674	0. 03%	0. 001%
80	6. 372	6. 356	6. 396	HH	298	5514	0. 24%	0. 010%
81	6. 440	6. 396	6. 476	HH	463	13776	0. 60%	0. 026%
82	6. 481	6. 476	6. 486	HH	238	975	0. 04%	0. 002%
83	6. 491	6. 486	6. 511	HH	268	3444	0. 15%	0. 007%
84	6. 523	6. 511	6. 543	HH	294	4713	0. 21%	0. 009%
85	6. 570	6. 543	6. 586	HH	431	8061	0. 35%	0. 015%
86	6. 590	6. 586	6. 595	HH	304	1630	0. 07%	0. 003%
87	6. 598	6. 595	6. 611	HH	360	2871	0. 13%	0. 005%
88	6. 621	6. 611	6. 632	HH	371	3981	0. 17%	0. 008%
89	6. 646	6. 632	6. 652	HH	432	4428	0. 19%	0. 008%

					rteres				
90	6. 670	6. 652	6. 691	HH	393	7765	0. 34%	0. 015%	
91	6. 696	6. 691	6. 700	HH	333	1711	0. 07%	0. 003%	
92	6. 729	6. 700	6. 757	HH	857	15447	0. 67%	0. 029%	
93	6. 762	6. 757	6. 785	HH	378	5123	0. 22%	0. 010%	
94	6. 811	6. 785	6. 864	HH	554	17334	0. 76%	0. 033%	
95	6. 883	6. 864	6. 906	HH	594	10360	0. 45%	0. 020%	
96	6. 916	6. 906	6. 933	HH	374	5179	0. 23%	0. 010%	
97	6. 937	6. 933	6. 942	HH	290	1405	0. 06%	0. 003%	
98	6. 957	6. 942	6. 977	HH	371	6224	0. 27%	0. 012%	
99	7. 009	6. 977	7. 041	HH	484	14191	0. 62%	0. 027%	
100	7. 056	7. 041	7. 068	HH	482	6240	0. 27%	0. 012%	
101	7. 072	7. 068	7. 086	HH	439	4134	0. 18%	0. 008%	
102	7. 100	7. 086	7. 117	HH	384	6246	0. 27%	0. 012%	
103	7. 134	7. 117	7. 139	HH	457	5290	0. 23%	0. 010%	
104	7. 143	7. 139	7. 156	HH	468	3583	0. 16%	0. 007%	
105	7. 169	7. 156	7. 173	HH	406	3598	0. 16%	0. 007%	
106	7. 181	7. 173	7. 193	HH	434	4497	0. 20%	0. 009%	
107	7. 201	7. 193	7. 215	HH	461	5165	0. 22%	0. 010%	
108	7. 252	7. 215	7. 258	HH	538	11833	0. 52%	0. 022%	
109	7. 268	7. 258	7. 288	HH	620	9218	0. 40%	0. 017%	
110	7. 307	7. 288	7. 335	HH	709	14135	0. 62%	0. 027%	
111	7. 368	7. 335	7. 393	HH	1628	27926	1. 22%	0. 053%	
112	7. 408	7. 393	7. 436	HH	591	12922	0. 56%	0. 025%	
113	7. 452	7. 436	7. 486	HH	876	18210	0. 79%	0. 035%	
114	7. 506	7. 486	7. 534	HH	1585	24110	1. 05%	0. 046%	
115	7. 536	7. 534	7. 543	HH	544	2440	0. 11%	0. 005%	
116	7. 553	7. 543	7. 573	HH	646	10310	0. 45%	0. 020%	
117	7. 584	7. 573	7. 603	HH	597	9276	0. 40%	0. 018%	
118	7. 608	7. 603	7. 614	HH	575	3366	0. 15%	0. 006%	
119	7. 630	7. 614	7. 636	HH	652	7800	0. 34%	0. 015%	
120	7. 640	7. 636	7. 647	HH	689	4145	0. 18%	0. 008%	
121	7. 679	7. 647	7. 697	HH	1393	26320	1. 15%	0. 050%	
122	7. 701	7. 697	7. 707	HH	1009	3785	0. 16%	0. 007%	
123	7. 713	7. 707	7. 718	HH	600	3715	0. 16%	0. 007%	
124	7. 727	7. 718	7. 733	HH	637	5576	0. 24%	0. 011%	
125	7. 736	7. 733	7. 763	HH	562	8991	0. 39%	0. 017%	
126	7. 769	7. 763	7. 776	HH	512	3450	0. 15%	0. 007%	
127	7. 780	7. 776	7. 793	HH	496	4807	0. 21%	0. 009%	
128	7. 802	7. 793	7. 833	HH	563	11865	0. 52%	0. 023%	
129	7. 856	7. 833	7. 888	HH	775	19837	0. 86%	0. 038%	
130	7. 891	7. 888	7. 933	HH	555	12466	0. 54%	0. 024%	
131	7. 949	7. 933	7. 955	HH	491	5890	0. 26%	0. 011%	
132	7. 966	7. 955	7. 991	HH	605	10723	0. 47%	0. 020%	
133	8. 002	7. 991	8. 009	HH	575	5447	0. 24%	0. 010%	
134	8. 014	8. 009	8. 020	HH	518	3453	0. 15%	0. 007%	
135	8. 023	8. 020	8. 042	HH	540	6193	0. 27%	0. 012%	
136	8. 050	8. 042	8. 055	HH	544	4008	0. 17%	0. 008%	
137	8. 059	8. 055	8. 063	HH	549	2445	0. 11%	0. 005%	
138	8. 067	8. 063	8. 082	HH	553	6254	0. 27%	0. 012%	
139	8. 113	8. 082	8. 133	HH	1414	26647	1. 16%	0. 051%	
140	8. 136	8. 133	8. 153	HH	797	9519	0. 41%	0. 018%	
141	8. 161	8. 153	8. 195	HH	752	16985	0. 74%	0. 032%	

					rteres			
142	8. 207	8. 195	8. 236	HH	773	16104	0. 70%	0. 031%
143	8. 268	8. 236	8. 280	HH	1044	22201	0. 97%	0. 042%
144	8. 292	8. 280	8. 304	HH	870	11784	0. 51%	0. 022%
145	8. 318	8. 304	8. 338	HH	978	16370	0. 71%	0. 031%
146	8. 342	8. 338	8. 347	HH	763	3864	0. 17%	0. 007%
147	8. 384	8. 347	8. 424	HH	1668	48597	2. 12%	0. 092%
148	8. 442	8. 424	8. 455	HH	964	15750	0. 69%	0. 030%
149	8. 489	8. 455	8. 505	HH	2416	42587	1. 85%	0. 081%
150	8. 516	8. 505	8. 534	HH	1657	23428	1. 02%	0. 044%
151	8. 566	8. 534	8. 604	HH	2275	58768	2. 56%	0. 112%
152	8. 609	8. 604	8. 627	HH	977	12614	0. 55%	0. 024%
153	8. 675	8. 627	8. 718	HH	2608	79749	3. 47%	0. 151%
154	8. 724	8. 718	8. 747	HH	1094	16431	0. 72%	0. 031%
155	8. 767	8. 747	8. 783	HH	1127	21156	0. 92%	0. 040%
156	8. 787	8. 783	8. 794	HH	856	5123	0. 22%	0. 010%
157	8. 817	8. 794	8. 830	HH	871	17361	0. 76%	0. 033%
158	8. 857	8. 830	8. 872	HH	816	18293	0. 80%	0. 035%
159	8. 904	8. 872	8. 907	HH	817	15211	0. 66%	0. 029%
160	8. 928	8. 907	8. 946	HH	1062	21290	0. 93%	0. 040%
161	8. 974	8. 946	9. 001	HH	5986	83993	3. 66%	0. 159%
162	9. 024	9. 001	9. 051	HH	1586	37543	1. 64%	0. 071%
163	9. 059	9. 051	9. 078	HH	1162	17741	0. 77%	0. 034%
164	9. 110	9. 078	9. 136	HH	1726	45162	1. 97%	0. 086%
165	9. 148	9. 136	9. 178	HH	1237	28793	1. 25%	0. 055%
166	9. 182	9. 178	9. 187	HH	1074	5143	0. 22%	0. 010%
167	9. 191	9. 187	9. 196	HH	1062	5906	0. 26%	0. 011%
168	9. 219	9. 196	9. 233	HH	2383	37669	1. 64%	0. 072%
169	9. 252	9. 233	9. 279	HH	3376	53698	2. 34%	0. 102%
170	9. 295	9. 279	9. 332	HH	1696	44912	1. 96%	0. 085%
171	9. 343	9. 332	9. 362	HH	1418	22543	0. 98%	0. 043%
172	9. 395	9. 362	9. 419	HH	3005	64532	2. 81%	0. 122%
173	9. 431	9. 419	9. 479	HH	2247	52566	2. 29%	0. 100%
174	9. 491	9. 479	9. 513	HH	1169	21004	0. 91%	0. 040%
175	9. 548	9. 513	9. 566	HH	2129	44448	1. 94%	0. 084%
176	9. 580	9. 566	9. 610	HH	1903	35857	1. 56%	0. 068%
177	9. 632	9. 610	9. 649	HH	1275	26773	1. 17%	0. 051%
178	9. 685	9. 649	9. 712	HH	2055	52441	2. 28%	0. 100%
179	9. 728	9. 712	9. 743	HH	1465	25466	1. 11%	0. 048%
180	9. 768	9. 743	9. 823	HH	5558	114503	4. 99%	0. 217%
181	9. 848	9. 823	9. 878	HH	2496	60281	2. 63%	0. 114%
182	9. 892	9. 878	9. 902	HH	1995	26329	1. 15%	0. 050%
183	9. 919	9. 902	9. 939	HH	3165	51543	2. 25%	0. 098%
184	9. 954	9. 939	9. 963	HH	1806	24841	1. 08%	0. 047%
185	9. 979	9. 963	10. 002	HH	2454	44435	1. 94%	0. 084%
186	10. 013	10. 002	10. 023	HH	1516	17060	0. 74%	0. 032%
187	10. 049	10. 023	10. 070	HH	5762	84381	3. 68%	0. 160%
188	10. 094	10. 070	10. 129	HH	3305	78149	3. 40%	0. 148%
189	10. 134	10. 129	10. 160	HH	1902	31863	1. 39%	0. 060%
190	10. 190	10. 160	10. 240	HH	4512	129076	5. 62%	0. 245%
191	10. 257	10. 240	10. 274	HH	1909	34555	1. 51%	0. 066%
192	10. 289	10. 274	10. 315	HH	1839	38627	1. 68%	0. 073%
193	10. 362	10. 315	10. 386	HH	1812	65641	2. 86%	0. 125%
194	10. 391	10. 386	10. 397	HH	1379	8830	0. 38%	0. 017%

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195	10. 401	10. 397	10. 412	HH	1366	11625	0. 51%	0. 022%	
196	10. 417	10. 412	10. 435	HH	1322	17932	0. 78%	0. 034%	
197	10. 460	10. 435	10. 473	HH	1556	32910	1. 43%	0. 062%	
198	10. 489	10. 473	10. 501	HH	1548	23959	1. 04%	0. 045%	
199	10. 521	10. 501	10. 548	HH	2098	49313	2. 15%	0. 094%	
200	10. 573	10. 548	10. 606	HH	2634	68635	2. 99%	0. 130%	
201	10. 630	10. 606	10. 641	HH	2776	48093	2. 09%	0. 091%	
202	10. 659	10. 641	10. 681	HH	3873	70258	3. 06%	0. 133%	
203	10. 699	10. 681	10. 740	HH	2920	77783	3. 39%	0. 148%	
204	10. 774	10. 740	10. 795	HH	3620	83712	3. 65%	0. 159%	
205	10. 799	10. 795	10. 811	HH	2541	22898	1. 00%	0. 043%	
206	10. 831	10. 811	10. 888	HH	4812	138516	6. 03%	0. 263%	
207	10. 928	10. 888	10. 937	HH	4234	89719	3. 91%	0. 170%	
208	10. 947	10. 937	10. 962	HH	4245	53966	2. 35%	0. 102%	
209	10. 983	10. 962	11. 028	HH	5709	152692	6. 65%	0. 290%	
210	11. 037	11. 028	11. 043	HH	2416	21452	0. 93%	0. 041%	
211	11. 056	11. 043	11. 064	HH	2610	31429	1. 37%	0. 060%	
212	11. 081	11. 064	11. 098	HH	3372	56207	2. 45%	0. 107%	
213	11. 108	11. 098	11. 133	HH	2466	48608	2. 12%	0. 092%	
214	11. 149	11. 133	11. 157	HH	3072	39351	1. 71%	0. 075%	
215	11. 181	11. 157	11. 228	HH	64398	761942	33. 19%	1. 446%	
216	11. 257	11. 228	11. 282	HH	19866	273057	11. 89%	0. 518%	
217	11. 285	11. 282	11. 313	HH	3305	56190	2. 45%	0. 107%	
218	11. 317	11. 313	11. 332	HH	2897	29690	1. 29%	0. 056%	
219	11. 340	11. 332	11. 372	HH	2776	63094	2. 75%	0. 120%	
220	11. 379	11. 372	11. 384	HH	2523	17790	0. 77%	0. 034%	
221	11. 392	11. 384	11. 415	HH	2587	45804	2. 00%	0. 087%	
222	11. 433	11. 415	11. 453	HH	2860	58727	2. 56%	0. 111%	
223	11. 475	11. 453	11. 517	HH	4938	127860	5. 57%	0. 243%	
224	11. 586	11. 517	11. 606	HH	3397	157732	6. 87%	0. 299%	
225	11. 633	11. 606	11. 661	HH	5251	128604	5. 60%	0. 244%	
226	11. 680	11. 661	11. 688	HH	3626	55018	2. 40%	0. 104%	
227	11. 718	11. 688	11. 760	HH	6362	182311	7. 94%	0. 346%	
228	11. 786	11. 760	11. 808	HH	4349	100310	4. 37%	0. 190%	
229	11. 838	11. 808	11. 857	HH	4425	105938	4. 61%	0. 201%	
230	11. 879	11. 857	11. 902	HH	4119	92328	4. 02%	0. 175%	
231	11. 918	11. 902	11. 925	HH	3322	44530	1. 94%	0. 085%	
232	11. 941	11. 925	11. 960	HH	3600	70032	3. 05%	0. 133%	
233	11. 990	11. 960	12. 005	HH	12526	192572	8. 39%	0. 366%	
234	12. 021	12. 005	12. 057	HH	15789	241502	10. 52%	0. 458%	
235	12. 105	12. 057	12. 122	HH	14479	317670	13. 84%	0. 603%	
236	12. 139	12. 122	12. 153	HH	10771	145248	6. 33%	0. 276%	
237	12. 169	12. 153	12. 205	HH	13245	225551	9. 82%	0. 428%	
238	12. 245	12. 205	12. 267	HH	4355	139127	6. 06%	0. 264%	
239	12. 307	12. 267	12. 332	HH	6117	179512	7. 82%	0. 341%	
240	12. 352	12. 332	12. 372	HH	8305	141752	6. 17%	0. 269%	
241	12. 383	12. 372	12. 418	HH	4816	124161	5. 41%	0. 236%	
242	12. 424	12. 418	12. 438	HH	4167	48573	2. 12%	0. 092%	
243	12. 462	12. 438	12. 485	HH	10520	188974	8. 23%	0. 359%	
244	12. 496	12. 485	12. 509	HH	4707	63720	2. 78%	0. 121%	
245	12. 523	12. 509	12. 535	HH	4902	74052	3. 23%	0. 141%	
246	12. 554	12. 535	12. 582	HH	6732	151733	6. 61%	0. 288%	

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247	12. 610	12. 582	12. 627	HH	5714	136105	5. 93%	0. 258%	
248	12. 642	12. 627	12. 652	HH	4914	71630	3. 12%	0. 136%	
249	12. 669	12. 652	12. 685	HH	5240	97884	4. 26%	0. 186%	
250	12. 715	12. 685	12. 732	HH	6443	157143	6. 84%	0. 298%	
251	12. 740	12. 732	12. 757	HH	5664	79473	3. 46%	0. 151%	
252	12. 784	12. 757	12. 824	HH	8091	246265	10. 73%	0. 467%	
253	12. 847	12. 824	12. 870	HH	10752	216542	9. 43%	0. 411%	
254	12. 895	12. 870	12. 915	HH	14197	266968	11. 63%	0. 507%	
255	12. 956	12. 915	12. 979	HH	10445	327131	14. 25%	0. 621%	
256	13. 014	12. 979	13. 055	HH	143047	1769134	77. 06%	3. 358%	
257	13. 075	13. 055	13. 092	HH	6288	123551	5. 38%	0. 235%	
258	13. 110	13. 092	13. 122	HH	5915	99269	4. 32%	0. 188%	
259	13. 146	13. 122	13. 155	HH	6871	127609	5. 56%	0. 242%	
260	13. 170	13. 155	13. 184	HH	8156	128121	5. 58%	0. 243%	
261	13. 198	13. 184	13. 215	HH	10534	171882	7. 49%	0. 326%	
262	13. 224	13. 215	13. 284	HH	8537	292043	12. 72%	0. 554%	
263	13. 313	13. 284	13. 336	HH	132801	1584489	69. 02%	3. 008%	
264	13. 346	13. 336	13. 352	HH	10315	92643	4. 04%	0. 176%	
265	13. 368	13. 352	13. 384	HH	17851	256285	11. 16%	0. 486%	
266	13. 400	13. 384	13. 432	HH	17988	315810	13. 76%	0. 599%	
267	13. 450	13. 432	13. 467	HH	7307	150647	6. 56%	0. 286%	
268	13. 486	13. 467	13. 498	HH	10659	162362	7. 07%	0. 308%	
269	13. 514	13. 498	13. 539	HH	11298	215959	9. 41%	0. 410%	
270	13. 580	13. 539	13. 608	HH	13744	377160	16. 43%	0. 716%	
271	13. 649	13. 608	13. 682	HH	9546	367336	16. 00%	0. 697%	
272	13. 711	13. 682	13. 728	HH	10733	234242	10. 20%	0. 445%	
273	13. 737	13. 728	13. 750	HH	8550	113956	4. 96%	0. 216%	
274	13. 775	13. 750	13. 814	HH	15205	406564	17. 71%	0. 772%	
275	13. 819	13. 814	13. 845	HH	8076	143966	6. 27%	0. 273%	
276	13. 849	13. 845	13. 854	HH	7630	38809	1. 69%	0. 074%	
277	13. 904	13. 854	13. 943	HH	26656	719574	31. 34%	1. 366%	
278	13. 970	13. 943	13. 987	HH	10042	235786	10. 27%	0. 448%	
279	14. 013	13. 987	14. 034	HH	21497	403916	17. 59%	0. 767%	
280	14. 053	14. 034	14. 074	HH	18299	325069	14. 16%	0. 617%	
281	14. 092	14. 074	14. 117	HH	11932	268443	11. 69%	0. 510%	
282	14. 158	14. 117	14. 166	HH	14593	356622	15. 53%	0. 677%	
283	14. 183	14. 166	14. 204	HH	19558	343379	14. 96%	0. 652%	
284	14. 223	14. 204	14. 268	HH	17841	470476	20. 49%	0. 893%	
285	14. 298	14. 268	14. 322	HH	12363	348002	15. 16%	0. 661%	
286	14. 342	14. 322	14. 350	HH	10502	168097	7. 32%	0. 319%	
287	14. 386	14. 350	14. 407	HH	11454	376511	16. 40%	0. 715%	
288	14. 413	14. 407	14. 430	HH	10914	148051	6. 45%	0. 281%	
289	14. 440	14. 430	14. 467	HH	10719	228921	9. 97%	0. 435%	
290	14. 492	14. 467	14. 506	HH	10967	241244	10. 51%	0. 458%	
291	14. 510	14. 506	14. 515	HH	10417	60760	2. 65%	0. 115%	
292	14. 519	14. 515	14. 530	HH	10439	88412	3. 85%	0. 168%	
293	14. 548	14. 530	14. 556	HH	11082	168218	7. 33%	0. 319%	
294	14. 609	14. 556	14. 626	HH	14878	544144	23. 70%	1. 033%	
295	14. 644	14. 626	14. 677	HH	19967	465038	20. 26%	0. 883%	
296	14. 722	14. 677	14. 735	HH	15475	466841	20. 33%	0. 886%	
297	14. 747	14. 735	14. 764	HH	15078	242360	10. 56%	0. 460%	
298	14. 774	14. 764	14. 795	HH	14102	256271	11. 16%	0. 486%	
299	14. 822	14. 795	14. 841	HH	21125	477107	20. 78%	0. 906%	

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300	14. 850	14. 841	14. 863	HH	15512	193017	8. 41%	0. 366%	
301	14. 887	14. 863	14. 910	HH	29759	599936	26. 13%	1. 139%	
302	15. 010	14. 985	15. 028	HH	15560	370407	16. 13%	0. 703%	
303	15. 120	15. 108	15. 127	HH	14418	166081	7. 23%	0. 315%	
304	15. 152	15. 127	15. 170	HH	18849	413541	18. 01%	0. 785%	
305	15. 200	15. 170	15. 220	HH	82058	1251497	54. 51%	2. 376%	
306	15. 241	15. 220	15. 277	HH	80580	1290164	56. 20%	2. 449%	
307	15. 293	15. 277	15. 308	HH	16974	308271	13. 43%	0. 585%	
308	15. 315	15. 308	15. 321	HH	16251	119837	5. 22%	0. 227%	
309	15. 363	15. 321	15. 415	HH	31597	1148826	50. 04%	2. 181%	
310	15. 444	15. 415	15. 475	HH	20853	662665	28. 86%	1. 258%	
311	15. 505	15. 475	15. 528	HH	22097	604938	26. 35%	1. 148%	
312	15. 547	15. 528	15. 604	HH	21824	885385	38. 56%	1. 681%	
313	15. 647	15. 604	15. 675	HH	25476	868917	37. 85%	1. 649%	
314	15. 688	15. 675	15. 722	HH	20278	548378	23. 89%	1. 041%	
315	15. 746	15. 722	15. 750	HH	19008	309481	13. 48%	0. 587%	
316	15. 754	15. 750	15. 762	HH	19094	132948	5. 79%	0. 252%	
317	15. 789	15. 762	15. 817	HH	22194	686869	29. 92%	1. 304%	
318	15. 834	15. 817	15. 852	HH	23424	462392	20. 14%	0. 878%	
319	15. 877	15. 852	15. 897	HH	33979	711138	30. 97%	1. 350%	
320	15. 915	15. 897	15. 947	HH	26692	692624	30. 17%	1. 315%	
321	15. 963	15. 947	15. 996	HH	24059	657091	28. 62%	1. 247%	
322	16. 037	15. 996	16. 072	HH	29358	1165952	50. 79%	2. 213%	
323	16. 115	16. 072	16. 133	HH	25806	844622	36. 79%	1. 603%	
324	16. 141	16. 133	16. 159	HH	22842	365279	15. 91%	0. 693%	
325	16. 165	16. 159	16. 174	HH	22757	190233	8. 29%	0. 361%	
326	16. 200	16. 174	16. 220	HH	25147	645219	28. 10%	1. 225%	
327	16. 238	16. 220	16. 260	HH	25643	590741	25. 73%	1. 121%	
328	16. 306	16. 260	16. 346	HH	26763	1268220	55. 24%	2. 407%	
329	16. 351	16. 346	16. 365	HH	23548	271334	11. 82%	0. 515%	
330	16. 385	16. 365	16. 399	HH	23493	470400	20. 49%	0. 893%	
331	16. 408	16. 399	16. 425	HH	23438	359893	15. 68%	0. 683%	
332	16. 494	16. 425	16. 510	HH	27120	1292455	56. 30%	2. 453%	
333	16. 517	16. 510	16. 532	HH	25907	333471	14. 52%	0. 633%	
334	16. 553	16. 532	16. 569	HH	29163	597637	26. 03%	1. 134%	
335	16. 588	16. 569	16. 599	HH	27428	484360	21. 10%	0. 919%	
336	16. 604	16. 599	16. 619	HH	27699	326681	14. 23%	0. 620%	
337	16. 678	16. 619	16. 693	HH	31067	1284110	55. 93%	2. 437%	
338	16. 697	16. 693	16. 719	HH	30785	454322	19. 79%	0. 862%	
339	16. 769	16. 719	16. 787	HH	111874	2295844	100. 00%	4. 358%	
340	16. 795	16. 787	16. 835	HH	60758	1175162	51. 19%	2. 231%	
341	16. 855	16. 835	16. 867	HH	29521	545512	23. 76%	1. 035%	
					Sum of corrected areas:		52681647		

FG011325. M Sat Feb 01 02:34:43 2025

## Report of Analysis

Client:	RU2 Engineering, LLC			Date Collected:	01/29/25	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR			Date Received:	01/30/25	
Client Sample ID:	JPP-51.1-012925			SDG No.:	Q1232	
Lab Sample ID:	Q1232-17			Matrix:	SOIL	
Analytical Method:	8015D DRO			% Solid:	94.4	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
FG015288.D	10	01/31/25 08:50	01/31/25 20:05	PB166415

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
<b>TARGETS</b>						
DRO	DRO	133000		1960		17600 ug/kg
<b>SURROGATES</b>						
16416-32-3	Tetracosane-d50	1.91		37 - 130		95% 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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG013125\  
Data File : FG015288.D  
Signal(s) : FID1A.ch  
Acq On : 31 Jan 2025 20:05  
Operator : YP\AJ  
Sample : Q1232-17 10X  
Misc :  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
FID\_G  
ClientSampleId :  
JPP-51.1-012925

Integration File: autoint1.e  
Quant Time: Feb 01 01:18:24 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 : Rx1-1ms  
Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

9) S TETRACOSANE-d50 (SURR...	15.059	244709	1.908 ug/ml
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Target Compounds

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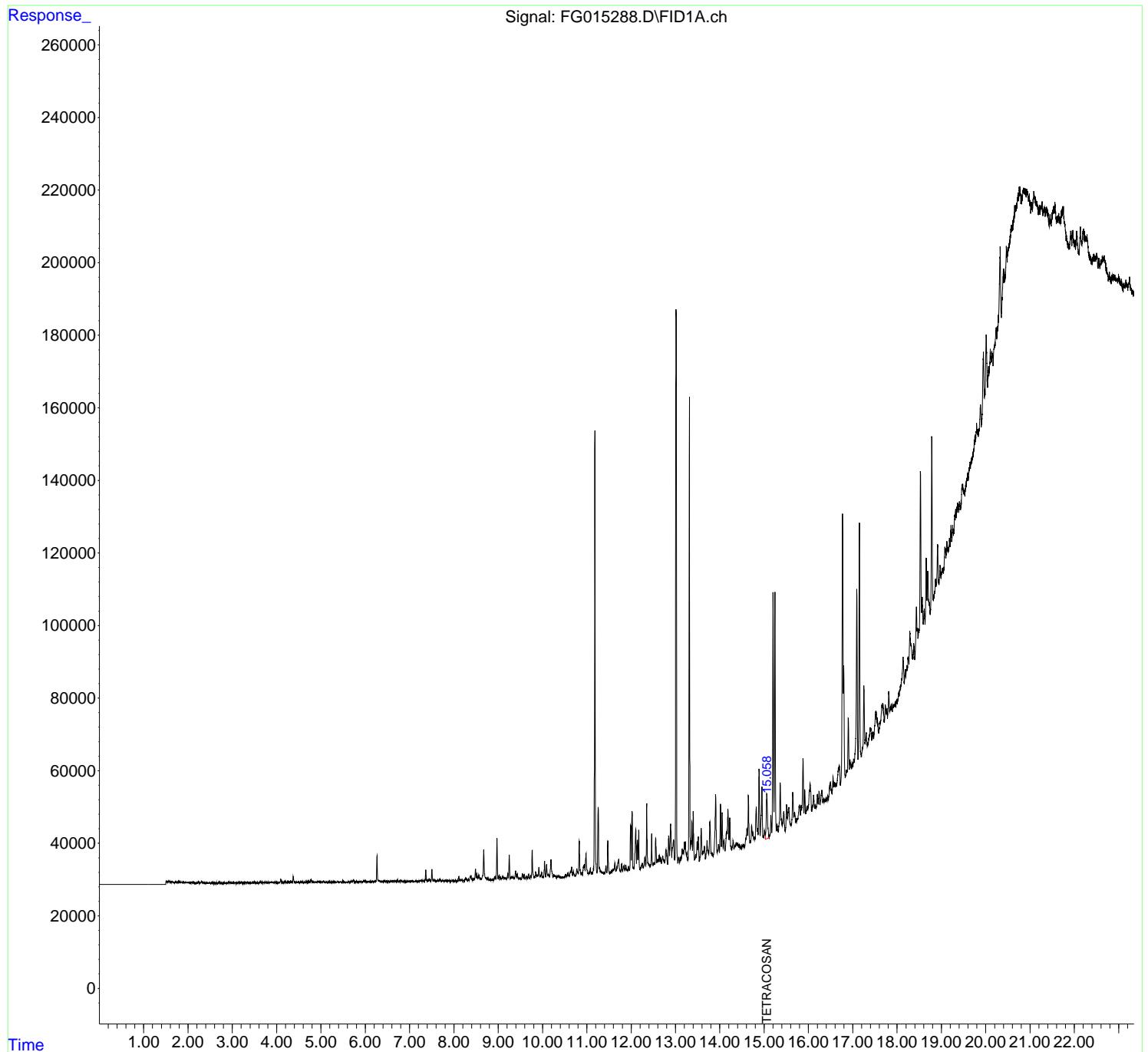
(f)=RT Delta > 1/2 Window (m)=manual int.

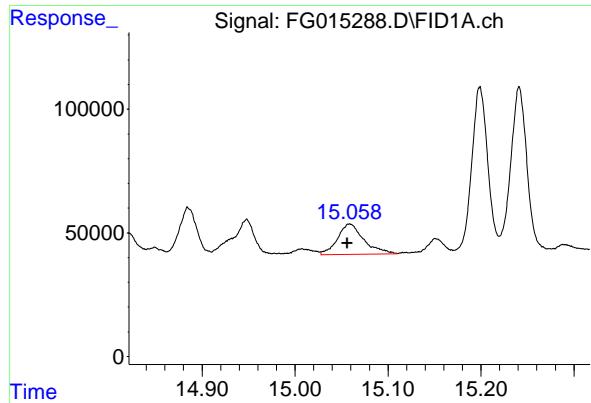
Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG013125\  
Data File : FG015288.D  
Signal(s) : FID1A.ch  
Acq On : 31 Jan 2025 20:05  
Operator : YP\AJ  
Sample : Q1232-17 10X  
Misc :  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
FID\_G  
ClientSampleId :  
JPP-51.1-012925

Integration File: autoint1.e  
Quant Time: Feb 01 01:18:24 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 : Rx1-1ms  
Signal Info : 20mx0.18mmx0.18um





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 15.059 min  
Delta R.T.: 0.003 min  
Instrument: FID\_G  
Response: 244709  
Conc: 1.91 ug/ml  
ClientSampleId : JPP-51.1-012925

## rteres

## Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG013125\  
 Data File : FG015288.D  
 Signal (s) : FID1A.ch  
 Acq On : 31 Jan 2025 20:05  
 Sample : Q1232-17 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. 375	4. 350	4. 420	BH	1535	15086	0. 69%	0. 028%
2	4. 424	4. 420	4. 432	PH	-38	-394	-0. 02%	-0. 001%
3	4. 439	4. 432	4. 464	PH	-41	-1238	-0. 06%	-0. 002%
4	4. 470	4. 464	4. 482	PH	19	-532	-0. 02%	-0. 001%
5	4. 492	4. 482	4. 513	PH	-22	-1388	-0. 06%	-0. 003%
6	4. 546	4. 513	4. 565	PH	116	-302	-0. 01%	-0. 001%
7	4. 569	4. 565	4. 580	PH	88	370	0. 02%	0. 001%
8	4. 585	4. 580	4. 604	HH	60	-102	-0. 00%	-0. 000%
9	4. 616	4. 604	4. 632	PH	22	-651	-0. 03%	-0. 001%
10	4. 635	4. 632	4. 638	PH	-33	-201	-0. 01%	-0. 000%
11	4. 658	4. 638	4. 687	PH	96	-473	-0. 02%	-0. 001%
12	4. 713	4. 687	4. 753	PH	165	278	0. 01%	0. 001%
13	4. 777	4. 753	4. 854	PH	691	7704	0. 35%	0. 015%
14	4. 863	4. 854	4. 903	PH	24	-1638	-0. 07%	-0. 003%
15	4. 936	4. 903	4. 958	PH	117	677	0. 03%	0. 001%
16	4. 967	4. 958	4. 987	PH	36	-146	-0. 01%	-0. 000%
17	5. 011	4. 987	5. 018	PH	78	302	0. 01%	0. 001%
18	5. 022	5. 018	5. 037	HH	71	379	0. 02%	0. 001%
19	5. 056	5. 037	5. 078	PH	139	1016	0. 05%	0. 002%
20	5. 082	5. 078	5. 102	PH	51	-380	-0. 02%	-0. 001%
21	5. 107	5. 102	5. 111	PH	30	-116	-0. 01%	-0. 000%
22	5. 114	5. 111	5. 130	PH	-18	-516	-0. 02%	-0. 001%
23	5. 135	5. 130	5. 145	PH	-10	-447	-0. 02%	-0. 001%
24	5. 149	5. 145	5. 153	PH	-8	-229	-0. 01%	-0. 000%
25	5. 157	5. 153	5. 165	PH	-9	-192	-0. 01%	-0. 000%
26	5. 176	5. 165	5. 183	PH	85	343	0. 02%	0. 001%
27	5. 195	5. 183	5. 199	PH	134	763	0. 03%	0. 001%
28	5. 205	5. 199	5. 219	PH	90	137	0. 01%	0. 000%
29	5. 234	5. 219	5. 264	PH	12	-1253	-0. 06%	-0. 002%
30	5. 295	5. 264	5. 304	PH	85	-207	-0. 01%	-0. 000%
31	5. 311	5. 304	5. 324	PH	34	31	0. 00%	0. 000%
32	5. 327	5. 324	5. 330	PH	14	-101	-0. 00%	-0. 000%
33	5. 337	5. 330	5. 353	PH	39	-247	-0. 01%	-0. 000%
34	5. 368	5. 353	5. 414	PH	170	268	0. 01%	0. 001%
35	5. 440	5. 414	5. 448	PH	60	-298	-0. 01%	-0. 001%
36	5. 450	5. 448	5. 482	PH	38	-616	-0. 03%	-0. 001%

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37	5. 495	5. 482	5. 516	PH	329	2782	0. 13%	0. 005%
38	5. 532	5. 516	5. 560	PH	18	-573	-0. 03%	-0. 001%
39	5. 564	5. 560	5. 570	PH	16	-95	-0. 00%	-0. 000%
40	5. 573	5. 570	5. 583	PH	-26	-323	-0. 01%	-0. 001%
41	5. 586	5. 583	5. 594	PH	25	-320	-0. 01%	-0. 001%
42	5. 632	5. 594	5. 647	PH	73	-1053	-0. 05%	-0. 002%
43	5. 651	5. 647	5. 659	PH	-11	-262	-0. 01%	-0. 000%
44	5. 690	5. 659	5. 710	PH	240	2008	0. 09%	0. 004%
45	5. 732	5. 710	5. 761	HH	672	7811	0. 35%	0. 015%
46	5. 776	5. 761	5. 786	PH	178	1151	0. 05%	0. 002%
47	5. 802	5. 786	5. 822	HH	216	1556	0. 07%	0. 003%
48	5. 828	5. 822	5. 836	PH	46	181	0. 01%	0. 000%
49	5. 840	5. 836	5. 850	PH	33	173	0. 01%	0. 000%
50	5. 857	5. 850	5. 865	PH	107	403	0. 02%	0. 001%
51	5. 884	5. 865	5. 911	PH	149	1609	0. 07%	0. 003%
52	5. 925	5. 911	5. 934	PH	66	216	0. 01%	0. 000%
53	5. 963	5. 934	5. 991	PH	261	5320	0. 24%	0. 010%
54	6. 006	5. 991	6. 049	HH	275	4849	0. 22%	0. 009%
55	6. 060	6. 049	6. 099	HH	192	1724	0. 08%	0. 003%
56	6. 103	6. 099	6. 124	PH	64	169	0. 01%	0. 000%
57	6. 129	6. 124	6. 136	PH	104	232	0. 01%	0. 000%
58	6. 145	6. 136	6. 152	PH	110	513	0. 02%	0. 001%
59	6. 168	6. 152	6. 192	HH	284	3736	0. 17%	0. 007%
60	6. 201	6. 192	6. 205	HH	179	721	0. 03%	0. 001%
61	6. 231	6. 205	6. 244	HH	189	2919	0. 13%	0. 006%
62	6. 265	6. 244	6. 305	HH	7262	77055	3. 50%	0. 145%
63	6. 314	6. 305	6. 330	HH	380	4184	0. 19%	0. 008%
64	6. 334	6. 330	6. 345	HH	185	1170	0. 05%	0. 002%
65	6. 349	6. 345	6. 358	HH	137	709	0. 03%	0. 001%
66	6. 371	6. 358	6. 386	HH	209	2022	0. 09%	0. 004%
67	6. 440	6. 386	6. 472	HH	312	7555	0. 34%	0. 014%
68	6. 506	6. 472	6. 510	HH	198	2484	0. 11%	0. 005%
69	6. 528	6. 510	6. 544	HH	199	2621	0. 12%	0. 005%
70	6. 569	6. 544	6. 595	HH	382	6012	0. 27%	0. 011%
71	6. 599	6. 595	6. 604	HH	148	770	0. 03%	0. 001%
72	6. 621	6. 604	6. 627	HH	279	2668	0. 12%	0. 005%
73	6. 631	6. 627	6. 639	HH	254	1461	0. 07%	0. 003%
74	6. 644	6. 639	6. 658	HH	303	2296	0. 10%	0. 004%
75	6. 666	6. 658	6. 669	HH	248	1296	0. 06%	0. 002%
76	6. 677	6. 669	6. 689	HH	368	2256	0. 10%	0. 004%
77	6. 693	6. 689	6. 699	HH	260	869	0. 04%	0. 002%
78	6. 728	6. 699	6. 756	HH	643	9719	0. 44%	0. 018%
79	6. 775	6. 756	6. 782	HH	223	2534	0. 12%	0. 005%
80	6. 787	6. 782	6. 790	HH	292	938	0. 04%	0. 002%
81	6. 808	6. 790	6. 849	HH	465	9500	0. 43%	0. 018%
82	6. 854	6. 849	6. 864	HH	286	1555	0. 07%	0. 003%
83	6. 883	6. 864	6. 889	HH	299	2746	0. 12%	0. 005%
84	6. 890	6. 889	6. 904	HH	244	1350	0. 06%	0. 003%
85	6. 911	6. 904	6. 920	HH	194	1115	0. 05%	0. 002%
86	6. 932	6. 920	6. 969	HH	223	4522	0. 21%	0. 009%
87	6. 975	6. 969	6. 981	HH	171	870	0. 04%	0. 002%
88	6. 989	6. 981	6. 997	HH	171	1187	0. 05%	0. 002%
89	7. 015	6. 997	7. 037	HH	272	3068	0. 14%	0. 006%

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90	7. 058	7. 037	7. 101	HH	487	8896	0. 40%	0. 017%
91	7. 136	7. 101	7. 162	HH	346	6864	0. 31%	0. 013%
92	7. 178	7. 162	7. 184	HH	335	2820	0. 13%	0. 005%
93	7. 191	7. 184	7. 196	HH	275	1399	0. 06%	0. 003%
94	7. 200	7. 196	7. 204	HH	235	685	0. 03%	0. 001%
95	7. 209	7. 204	7. 214	HH	250	1063	0. 05%	0. 002%
96	7. 230	7. 214	7. 234	HH	434	3736	0. 17%	0. 007%
97	7. 239	7. 234	7. 250	HH	391	3599	0. 16%	0. 007%
98	7. 268	7. 250	7. 282	HH	486	7764	0. 35%	0. 015%
99	7. 286	7. 282	7. 298	HH	372	3318	0. 15%	0. 006%
100	7. 304	7. 298	7. 334	HH	428	7457	0. 34%	0. 014%
101	7. 367	7. 334	7. 390	HH	3381	42306	1. 92%	0. 080%
102	7. 407	7. 390	7. 414	HH	467	5894	0. 27%	0. 011%
103	7. 419	7. 414	7. 423	HH	432	1992	0. 09%	0. 004%
104	7. 430	7. 423	7. 438	HH	507	3681	0. 17%	0. 007%
105	7. 454	7. 438	7. 483	HH	608	10838	0. 49%	0. 020%
106	7. 505	7. 483	7. 527	HH	3524	39893	1. 81%	0. 075%
107	7. 531	7. 527	7. 537	HH	423	2251	0. 10%	0. 004%
108	7. 548	7. 537	7. 570	HH	539	7807	0. 35%	0. 015%
109	7. 581	7. 570	7. 600	HH	434	6075	0. 28%	0. 011%
110	7. 603	7. 600	7. 614	HH	415	2704	0. 12%	0. 005%
111	7. 630	7. 614	7. 658	HH	477	10354	0. 47%	0. 020%
112	7. 680	7. 658	7. 705	HH	867	15801	0. 72%	0. 030%
113	7. 709	7. 705	7. 714	HH	391	1905	0. 09%	0. 004%
114	7. 719	7. 714	7. 735	HH	409	4794	0. 22%	0. 009%
115	7. 742	7. 735	7. 760	HH	395	5029	0. 23%	0. 009%
116	7. 763	7. 760	7. 768	HH	311	1273	0. 06%	0. 002%
117	7. 800	7. 768	7. 805	HH	445	6973	0. 32%	0. 013%
118	7. 808	7. 805	7. 814	HH	349	1942	0. 09%	0. 004%
119	7. 821	7. 814	7. 841	HH	422	5360	0. 24%	0. 010%
120	7. 863	7. 841	7. 884	HH	536	8992	0. 41%	0. 017%
121	7. 897	7. 884	7. 902	HH	389	3292	0. 15%	0. 006%
122	7. 908	7. 902	7. 920	HH	363	3062	0. 14%	0. 006%
123	7. 923	7. 920	7. 953	HH	328	4812	0. 22%	0. 009%
124	7. 972	7. 953	7. 984	HH	443	5890	0. 27%	0. 011%
125	7. 989	7. 984	8. 000	HH	326	2377	0. 11%	0. 004%
126	8. 020	8. 000	8. 052	HH	481	10000	0. 45%	0. 019%
127	8. 054	8. 052	8. 063	HH	440	2100	0. 10%	0. 004%
128	8. 067	8. 063	8. 086	HH	289	4352	0. 20%	0. 008%
129	8. 111	8. 086	8. 152	HH	1554	30043	1. 36%	0. 057%
130	8. 170	8. 152	8. 197	HH	572	12368	0. 56%	0. 023%
131	8. 210	8. 197	8. 216	HH	489	5009	0. 23%	0. 009%
132	8. 218	8. 216	8. 244	HH	547	7194	0. 33%	0. 014%
133	8. 269	8. 244	8. 305	HH	1126	26267	1. 19%	0. 050%
134	8. 322	8. 305	8. 350	HH	641	14892	0. 68%	0. 028%
135	8. 383	8. 350	8. 428	HH	1721	47934	2. 18%	0. 090%
136	8. 457	8. 428	8. 467	HH	948	17770	0. 81%	0. 034%
137	8. 488	8. 467	8. 504	HH	3486	45803	2. 08%	0. 086%
138	8. 516	8. 504	8. 533	HH	2357	29112	1. 32%	0. 055%
139	8. 565	8. 533	8. 603	HH	1965	53970	2. 45%	0. 102%
140	8. 613	8. 603	8. 626	HH	939	10939	0. 50%	0. 021%
141	8. 674	8. 626	8. 719	HH	8921	157227	7. 14%	0. 297%

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142	8. 726	8. 719	8. 749	HH	1104	15969	0. 73%	0. 030%	
143	8. 765	8. 749	8. 801	HH	1360	26140	1. 19%	0. 049%	
144	8. 815	8. 801	8. 844	HH	721	15101	0. 69%	0. 028%	
145	8. 859	8. 844	8. 869	HH	638	8518	0. 39%	0. 016%	
146	8. 881	8. 869	8. 907	HH	657	13808	0. 63%	0. 026%	
147	8. 927	8. 907	8. 950	HH	1539	27712	1. 26%	0. 052%	
148	8. 974	8. 950	9. 007	HH	11988	141923	6. 45%	0. 268%	
149	9. 022	9. 007	9. 077	HH	1964	51967	2. 36%	0. 098%	
150	9. 094	9. 077	9. 102	HH	1379	17918	0. 81%	0. 034%	
151	9. 111	9. 102	9. 134	HH	1417	23427	1. 06%	0. 044%	
152	9. 148	9. 134	9. 194	HH	1105	35737	1. 62%	0. 067%	
153	9. 217	9. 194	9. 232	HH	2345	37906	1. 72%	0. 072%	
154	9. 251	9. 232	9. 279	HH	7529	96488	4. 38%	0. 182%	
155	9. 295	9. 279	9. 299	HH	1347	15275	0. 69%	0. 029%	
156	9. 312	9. 299	9. 330	HH	1482	24476	1. 11%	0. 046%	
157	9. 345	9. 330	9. 361	HH	1324	21716	0. 99%	0. 041%	
158	9. 395	9. 361	9. 414	HH	3055	59856	2. 72%	0. 113%	
159	9. 431	9. 414	9. 477	HH	2283	51971	2. 36%	0. 098%	
160	9. 491	9. 477	9. 522	HH	1070	24541	1. 11%	0. 046%	
161	9. 547	9. 522	9. 564	HH	2302	37763	1. 72%	0. 071%	
162	9. 579	9. 564	9. 604	HH	2015	33348	1. 52%	0. 063%	
163	9. 631	9. 604	9. 652	HH	1687	34950	1. 59%	0. 066%	
164	9. 685	9. 652	9. 707	HH	2176	47113	2. 14%	0. 089%	
165	9. 729	9. 707	9. 744	HH	1801	30382	1. 38%	0. 057%	
166	9. 767	9. 744	9. 824	HH	8715	146636	6. 66%	0. 277%	
167	9. 846	9. 824	9. 877	HH	2689	60466	2. 75%	0. 114%	
168	9. 890	9. 877	9. 899	HH	1930	22999	1. 04%	0. 043%	
169	9. 919	9. 899	9. 939	HH	4100	65352	2. 97%	0. 123%	
170	9. 950	9. 939	9. 962	HH	1671	22135	1. 01%	0. 042%	
171	9. 981	9. 962	10. 012	HH	2663	54911	2. 49%	0. 104%	
172	10. 047	10. 012	10. 072	HH	5652	99069	4. 50%	0. 187%	
173	10. 093	10. 072	10. 162	HH	4850	125780	5. 71%	0. 237%	
174	10. 192	10. 162	10. 241	HH	6234	153312	6. 97%	0. 289%	
175	10. 256	10. 241	10. 276	HH	2077	36959	1. 68%	0. 070%	
176	10. 286	10. 276	10. 317	HH	1685	36467	1. 66%	0. 069%	
177	10. 358	10. 317	10. 421	HH	1738	86516	3. 93%	0. 163%	
178	10. 462	10. 421	10. 473	HH	1362	39556	1. 80%	0. 075%	
179	10. 489	10. 473	10. 504	HH	1465	25069	1. 14%	0. 047%	
180	10. 520	10. 504	10. 549	HH	2023	45883	2. 08%	0. 087%	
181	10. 571	10. 549	10. 598	HH	2545	57634	2. 62%	0. 109%	
182	10. 630	10. 598	10. 641	HH	2979	59217	2. 69%	0. 112%	
183	10. 657	10. 641	10. 681	HH	4065	72005	3. 27%	0. 136%	
184	10. 699	10. 681	10. 738	HH	2957	72240	3. 28%	0. 136%	
185	10. 776	10. 738	10. 807	HH	3706	103964	4. 72%	0. 196%	
186	10. 829	10. 807	10. 888	HH	11345	211646	9. 62%	0. 399%	
187	10. 926	10. 888	10. 936	HH	4434	91606	4. 16%	0. 173%	
188	10. 946	10. 936	10. 959	HH	4875	58691	2. 67%	0. 111%	
189	10. 982	10. 959	11. 027	HH	7927	183581	8. 34%	0. 346%	
190	11. 032	11. 027	11. 037	HH	2500	14548	0. 66%	0. 027%	
191	11. 056	11. 037	11. 063	HH	2686	39444	1. 79%	0. 074%	
192	11. 079	11. 063	11. 098	HH	3869	63408	2. 88%	0. 120%	
193	11. 108	11. 098	11. 130	HH	2689	47537	2. 16%	0. 090%	
194	11. 148	11. 130	11. 156	HH	3852	48008	2. 18%	0. 091%	

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195	11.	181	11.	156	11.	227	HH	123426	1416160	64.	34%	2.	672%
196	11.	256	11.	227	11.	278	HH	20559	281745	12.	80%	0.	532%
197	11.	287	11.	278	11.	328	HH	3986	96532	4.	39%	0.	182%
198	11.	335	11.	328	11.	342	HH	2691	22550	1.	02%	0.	043%
199	11.	353	11.	342	11.	383	HH	2678	62728	2.	85%	0.	118%
200	11.	395	11.	383	11.	408	HH	2635	37139	1.	69%	0.	070%
201	11.	430	11.	408	11.	451	HH	4380	83252	3.	78%	0.	157%
202	11.	473	11.	451	11.	519	HH	11401	201406	9.	15%	0.	380%
203	11.	560	11.	519	11.	565	HH	3024	75845	3.	45%	0.	143%
204	11.	586	11.	565	11.	604	HH	3398	75153	3.	41%	0.	142%
205	11.	631	11.	604	11.	659	HH	5338	127275	5.	78%	0.	240%
206	11.	719	11.	659	11.	759	HH	6389	261370	11.	87%	0.	493%
207	11.	787	11.	759	11.	809	HH	4936	113789	5.	17%	0.	215%
208	11.	836	11.	809	11.	857	HH	4498	108103	4.	91%	0.	204%
209	11.	879	11.	857	11.	901	HH	4692	100467	4.	56%	0.	190%
210	11.	919	11.	901	11.	926	HH	3372	47850	2.	17%	0.	090%
211	11.	941	11.	926	11.	959	HH	4305	73763	3.	35%	0.	139%
212	11.	988	11.	959	12.	003	HH	15466	226098	10.	27%	0.	427%
213	12.	020	12.	003	12.	047	HH	19427	272587	12.	38%	0.	514%
214	12.	052	12.	047	12.	062	HH	3841	34196	1.	55%	0.	065%
215	12.	103	12.	062	12.	121	HH	14203	295819	13.	44%	0.	558%
216	12.	138	12.	121	12.	152	HH	11447	155570	7.	07%	0.	294%
217	12.	169	12.	152	12.	199	HH	14305	227933	10.	36%	0.	430%
218	12.	215	12.	199	12.	226	HH	4108	59989	2.	73%	0.	113%
219	12.	250	12.	226	12.	270	HH	5184	121094	5.	50%	0.	229%
220	12.	307	12.	270	12.	329	HH	6711	182642	8.	30%	0.	345%
221	12.	351	12.	329	12.	391	HH	21616	355595	16.	16%	0.	671%
222	12.	395	12.	391	12.	417	HH	5009	74214	3.	37%	0.	140%
223	12.	426	12.	417	12.	432	HH	4515	37625	1.	71%	0.	071%
224	12.	462	12.	432	12.	486	HH	13251	240138	10.	91%	0.	453%
225	12.	490	12.	486	12.	492	HH	4853	18313	0.	83%	0.	035%
226	12.	520	12.	492	12.	533	HH	5337	123748	5.	62%	0.	234%
227	12.	553	12.	533	12.	579	HH	12052	216494	9.	84%	0.	409%
228	12.	591	12.	579	12.	599	HH	6051	68477	3.	11%	0.	129%
229	12.	609	12.	599	12.	619	HH	6273	70918	3.	22%	0.	134%
230	12.	633	12.	619	12.	650	HH	7400	122497	5.	57%	0.	231%
231	12.	664	12.	650	12.	682	HH	6678	115671	5.	26%	0.	218%
232	12.	711	12.	682	12.	729	HH	7157	172675	7.	85%	0.	326%
233	12.	736	12.	729	12.	753	HH	6231	83586	3.	80%	0.	158%
234	12.	784	12.	753	12.	821	HH	8839	280912	12.	76%	0.	530%
235	12.	846	12.	821	12.	863	HH	12701	214959	9.	77%	0.	406%
236	12.	891	12.	863	12.	914	HH	16043	357808	16.	26%	0.	675%
237	12.	956	12.	914	12.	984	HH	11517	369346	16.	78%	0.	697%
238	13.	013	12.	984	13.	057	HH	157550	1968273	89.	43%	3.	714%
239	13.	075	13.	057	13.	092	HH	6738	125329	5.	69%	0.	236%
240	13.	112	13.	092	13.	127	HH	6824	131803	5.	99%	0.	249%
241	13.	149	13.	127	13.	160	HH	9061	153947	6.	99%	0.	290%
242	13.	170	13.	160	13.	182	HH	8710	111177	5.	05%	0.	210%
243	13.	199	13.	182	13.	211	HH	11014	162506	7.	38%	0.	307%
244	13.	221	13.	211	13.	241	HH	11039	173596	7.	89%	0.	328%
245	13.	251	13.	241	13.	284	HH	7738	177976	8.	09%	0.	336%
246	13.	312	13.	284	13.	335	HH	133185	1612418	73.	26%	3.	043%

						rteres			
247	13. 345	13. 335	13. 353	HH	11347	115344	5. 24%	0. 218%	
248	13. 367	13. 353	13. 383	HH	16542	235921	10. 72%	0. 445%	
249	13. 399	13. 383	13. 428	HH	19453	319768	14. 53%	0. 603%	
250	13. 452	13. 428	13. 466	HH	7448	155560	7. 07%	0. 294%	
251	13. 486	13. 466	13. 497	HH	11082	168781	7. 67%	0. 318%	
252	13. 512	13. 497	13. 538	HH	12444	227507	10. 34%	0. 429%	
253	13. 579	13. 538	13. 605	HH	14698	379702	17. 25%	0. 716%	
254	13. 619	13. 605	13. 627	HH	8566	107280	4. 87%	0. 202%	
255	13. 650	13. 627	13. 679	HH	9812	257482	11. 70%	0. 486%	
256	13. 711	13. 679	13. 750	HH	11338	372932	16. 94%	0. 704%	
257	13. 774	13. 750	13. 816	HH	16583	436379	19. 83%	0. 823%	
258	13. 824	13. 816	13. 844	HH	7936	127910	5. 81%	0. 241%	
259	13. 904	13. 844	13. 940	HH	24140	721968	32. 80%	1. 362%	
260	13. 971	13. 940	13. 991	HH	10365	271854	12. 35%	0. 513%	
261	14. 013	13. 991	14. 034	HH	21535	375590	17. 06%	0. 709%	
262	14. 052	14. 034	14. 073	HH	19080	320107	14. 54%	0. 604%	
263	14. 092	14. 073	14. 117	HH	11411	265127	12. 05%	0. 500%	
264	14. 157	14. 117	14. 167	HH	13818	353941	16. 08%	0. 668%	
265	14. 183	14. 167	14. 206	HH	19996	368609	16. 75%	0. 696%	
266	14. 223	14. 206	14. 269	HH	17694	456534	20. 74%	0. 861%	
267	14. 297	14. 269	14. 321	HH	11423	312971	14. 22%	0. 591%	
268	14. 340	14. 321	14. 354	HH	10092	191872	8. 72%	0. 362%	
269	14. 368	14. 354	14. 376	HH	10696	137670	6. 25%	0. 260%	
270	14. 388	14. 376	14. 428	HH	10740	321793	14. 62%	0. 607%	
271	14. 443	14. 428	14. 477	HH	10289	283654	12. 89%	0. 535%	
272	14. 495	14. 477	14. 512	HH	10122	209438	9. 52%	0. 395%	
273	14. 517	14. 512	14. 521	HH	9928	50297	2. 29%	0. 095%	
274	14. 524	14. 521	14. 529	HH	9986	48584	2. 21%	0. 092%	
275	14. 547	14. 529	14. 558	HH	10322	175191	7. 96%	0. 331%	
276	14. 613	14. 558	14. 627	HH	14461	509177	23. 13%	0. 961%	
277	14. 643	14. 627	14. 678	HH	23707	487362	22. 14%	0. 920%	
278	14. 718	14. 678	14. 733	HH	15630	427407	19. 42%	0. 807%	
279	14. 745	14. 733	14. 764	HH	13606	234442	10. 65%	0. 442%	
280	14. 777	14. 764	14. 789	HH	12365	187010	8. 50%	0. 353%	
281	14. 821	14. 789	14. 841	HH	20417	499482	22. 69%	0. 943%	
282	14. 849	14. 841	14. 862	HH	14897	180058	8. 18%	0. 340%	
283	14. 885	14. 862	14. 911	HH	30497	594214	27. 00%	1. 121%	
284	14. 948	14. 911	14. 987	HH	26047	773308	35. 13%	1. 459%	
285	15. 007	14. 987	15. 027	HH	14224	324359	14. 74%	0. 612%	
286	15. 059	15. 027	15. 111	HH	24298	843280	38. 31%	1. 591%	
287	15. 151	15. 111	15. 171	HH	18379	522794	23. 75%	0. 987%	
288	15. 199	15. 171	15. 220	HH	79637	1180352	53. 63%	2. 227%	
289	15. 241	15. 220	15. 276	HH	79722	1248015	56. 70%	2. 355%	
290	15. 289	15. 276	15. 319	HH	15873	389177	17. 68%	0. 734%	
291	15. 361	15. 319	15. 410	HH	27399	1007366	45. 77%	1. 901%	
292	15. 441	15. 410	15. 476	HH	19422	653331	29. 68%	1. 233%	
293	15. 505	15. 476	15. 527	HH	21276	553530	25. 15%	1. 045%	
294	15. 554	15. 527	15. 601	HH	20552	794034	36. 08%	1. 498%	
295	15. 643	15. 601	15. 677	HH	24783	875520	39. 78%	1. 652%	
296	15. 689	15. 677	15. 707	HH	19164	329947	14. 99%	0. 623%	
297	15. 722	15. 707	15. 729	HH	17088	220456	10. 02%	0. 416%	
298	15. 744	15. 729	15. 755	HH	17453	268590	12. 20%	0. 507%	
299	15. 795	15. 755	15. 818	HH	21167	729128	33. 13%	1. 376%	

						rteres			
300	15. 837	15. 818	15. 847	HH	21149	356518	16. 20%	0. 673%	
301	15. 877	15. 847	15. 897	HH	33989	769316	34. 95%	1. 452%	
302	15. 915	15. 897	15. 943	HH	25294	592309	26. 91%	1. 118%	
303	15. 961	15. 943	15. 971	HH	20713	334654	15. 20%	0. 631%	
304	16. 037	15. 971	16. 074	HH	27070	1412119	64. 16%	2. 665%	
305	16. 115	16. 074	16. 142	HH	23951	880110	39. 99%	1. 661%	
306	16. 161	16. 142	16. 178	HH	21065	447117	20. 31%	0. 844%	
307	16. 201	16. 178	16. 216	HH	24128	506893	23. 03%	0. 956%	
308	16. 238	16. 216	16. 261	HH	24981	619937	28. 17%	1. 170%	
309	16. 302	16. 261	16. 329	HH	25235	957290	43. 49%	1. 806%	
310	16. 346	16. 329	16. 358	HH	23076	386813	17. 57%	0. 730%	
311	16. 378	16. 358	16. 386	HH	22709	377250	17. 14%	0. 712%	
312	16. 409	16. 386	16. 422	HH	22989	492040	22. 36%	0. 928%	
313	16. 436	16. 422	16. 450	HH	23670	397214	18. 05%	0. 750%	
314	16. 497	16. 450	16. 530	HH	27593	1225268	55. 67%	2. 312%	
315	16. 553	16. 530	16. 571	HH	28923	659860	29. 98%	1. 245%	
316	16. 586	16. 571	16. 596	HH	27453	390290	17. 73%	0. 736%	
317	16. 604	16. 596	16. 620	HH	27222	395992	17. 99%	0. 747%	
318	16. 628	16. 620	16. 639	HH	26716	302549	13. 75%	0. 571%	
319	16. 675	16. 639	16. 682	HH	31217	764473	34. 73%	1. 443%	
320	16. 697	16. 682	16. 718	HH	32079	650160	29. 54%	1. 227%	
321	16. 768	16. 718	16. 786	HH	101272	2201010	100. 00%	4. 153%	
					Sum of corrected areas:	52994533			

FG011325. M Sat Feb 01 02:37:19 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.: Q1232 SAS No.: Q1232 SDG No.: Q1232

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

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

**Instrument :**  
**FID\_E**  
**ClientSampleId :**  
**100 TRPH STD**

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

Volume Inj. : 1uL  
 Signal Phase : Rx1-1ms  
 Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc	Units
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**System Monitoring Compounds**

9) S TETRACOSANE-d50 (SURR... 15.260 9326838 100.174 ug/ml

**Target Compounds**

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

(f)=RT Delta > 1/2 Window

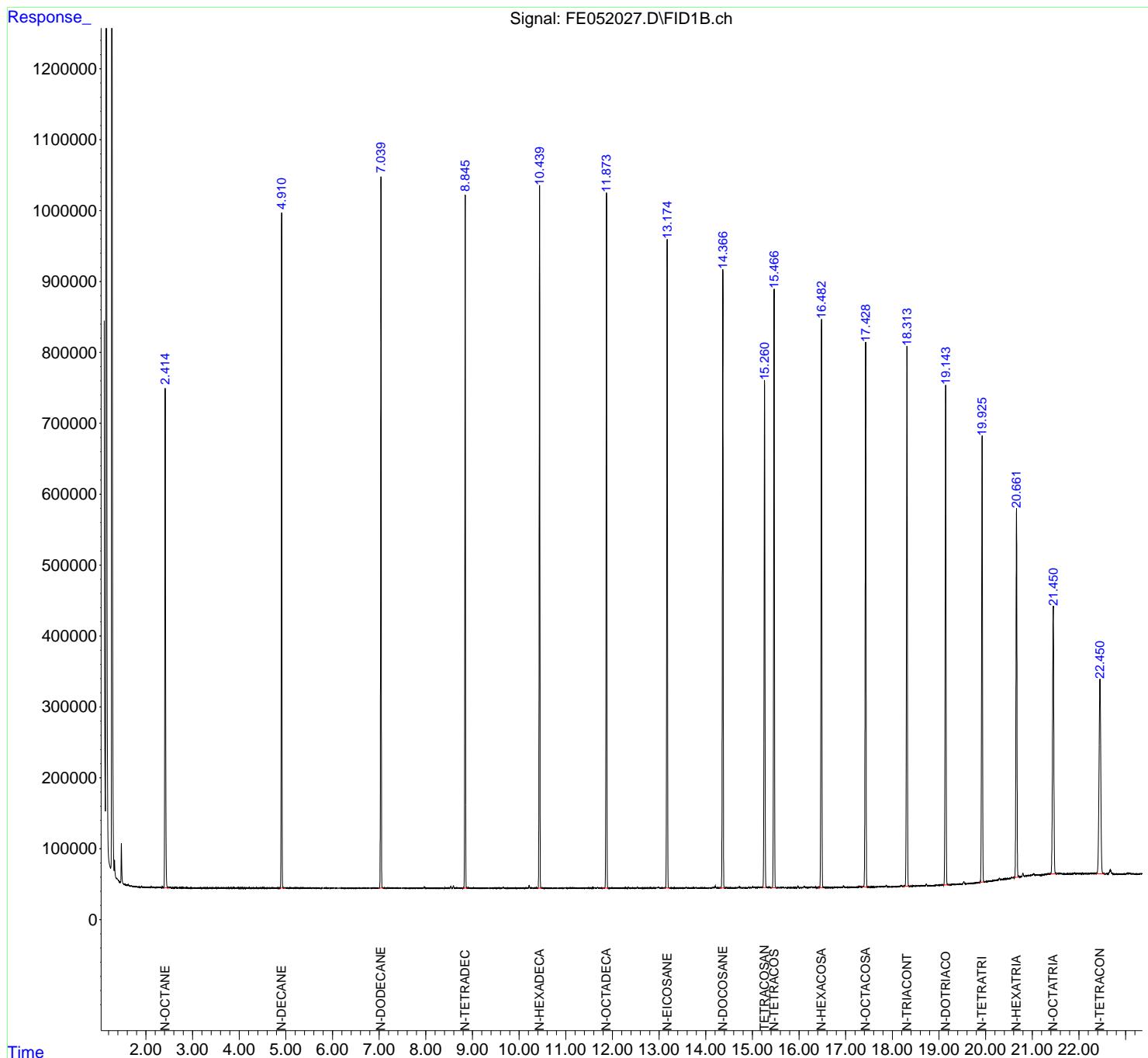
(m)=manual int.

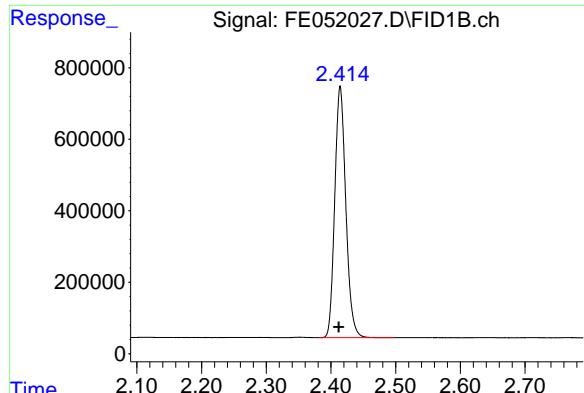
Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_E\Data\FE012325\  
 Data File : FE052027.D  
 Signal(s) : FID1B.ch  
 Acq On : 23 Jan 2025 22:06  
 Operator : YP\AJ  
 Sample : 100 TRPH STD  
 Misc :  
 ALS Vial : 22 Sample Multiplier: 1

**Instrument :**  
**FID\_E**  
**ClientSampleId :**  
**100 TRPH STD**

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

Volume Inj. : 1uL  
 Signal Phase : Rx1-1ms  
 Signal Info : 20mx0.18mmx0.18um

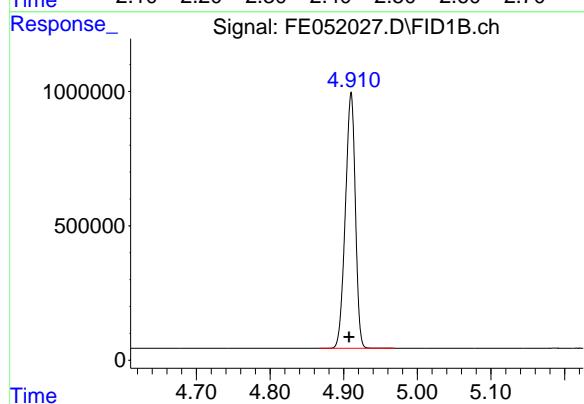




#1 N-OCTANE

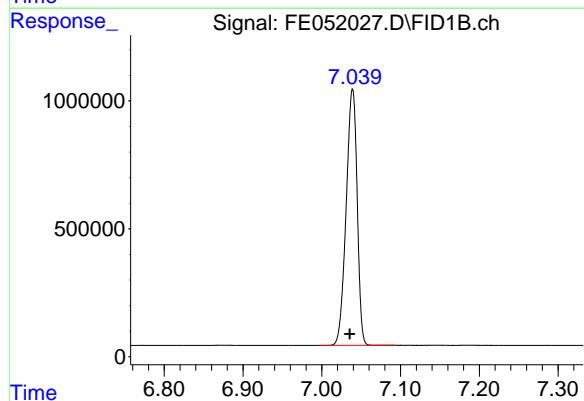
R.T.: 2.414 min  
Delta R.T.: 0.002 min  
Response: 8352750  
Conc: 103.37 ug/ml

Instrument: FID\_E  
ClientSampleId: 100 TRPH STD



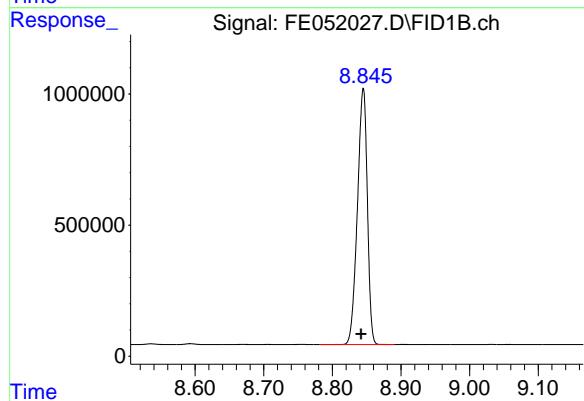
#2 N-DECANE

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



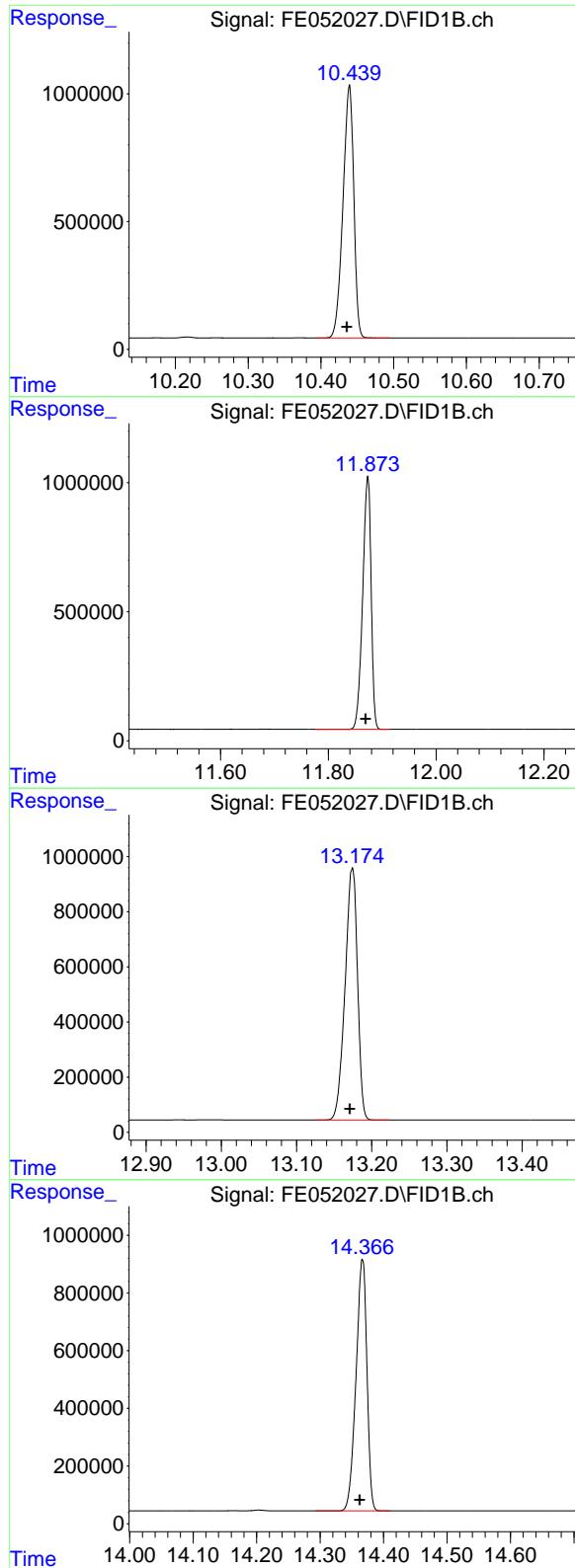
#3 N-DODECANE

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



#4 N-TETRADECANE

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



## #5 N-HEXADECANE

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

Instrument: FID\_E  
 ClientSampleId : 100 TRPH STD

## #6 N-OCTADECANE

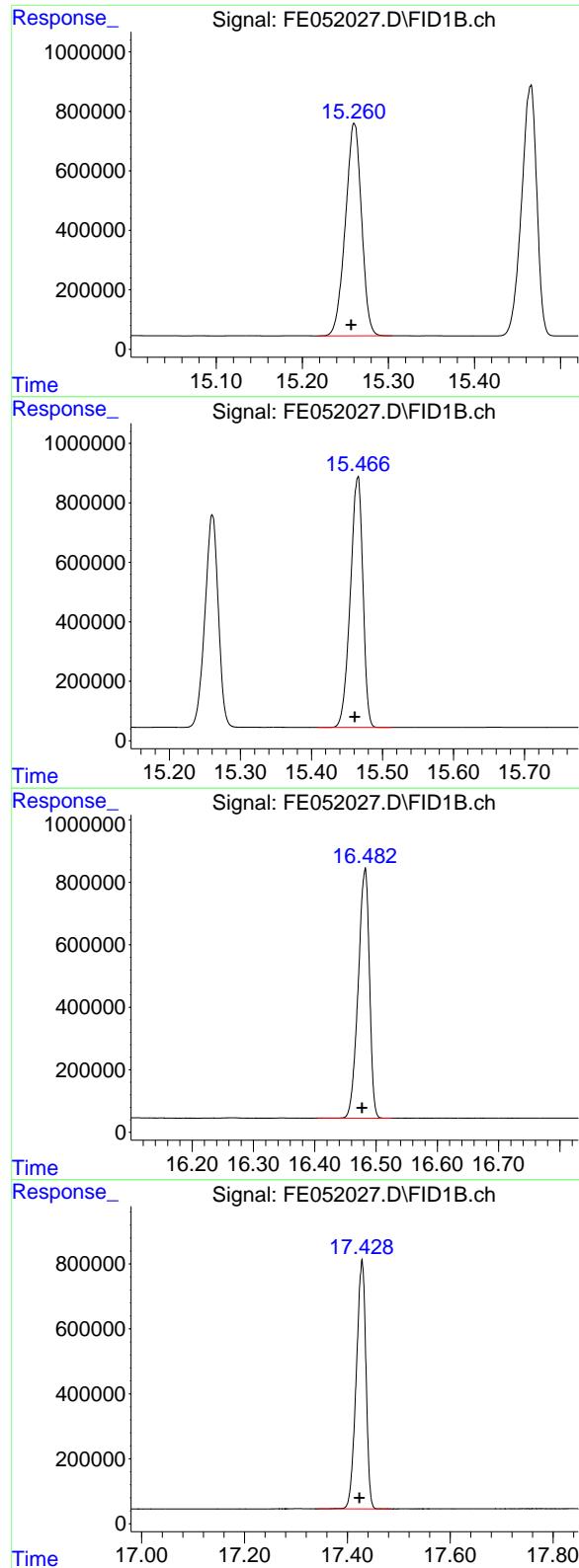
R.T.: 11.873 min  
 Delta R.T.: 0.004 min  
 Response: 10670149  
 Conc: 101.68 ug/ml

## #7 N-EICOSANE

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

## #8 N-DOCOSANE

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



### #9 TETRACOSANE-d50 (SURROGATE)

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

Instrument:

FID\_E

ClientSampleId :  
100 TRPH STD

### #10 N-TETRACOSANE

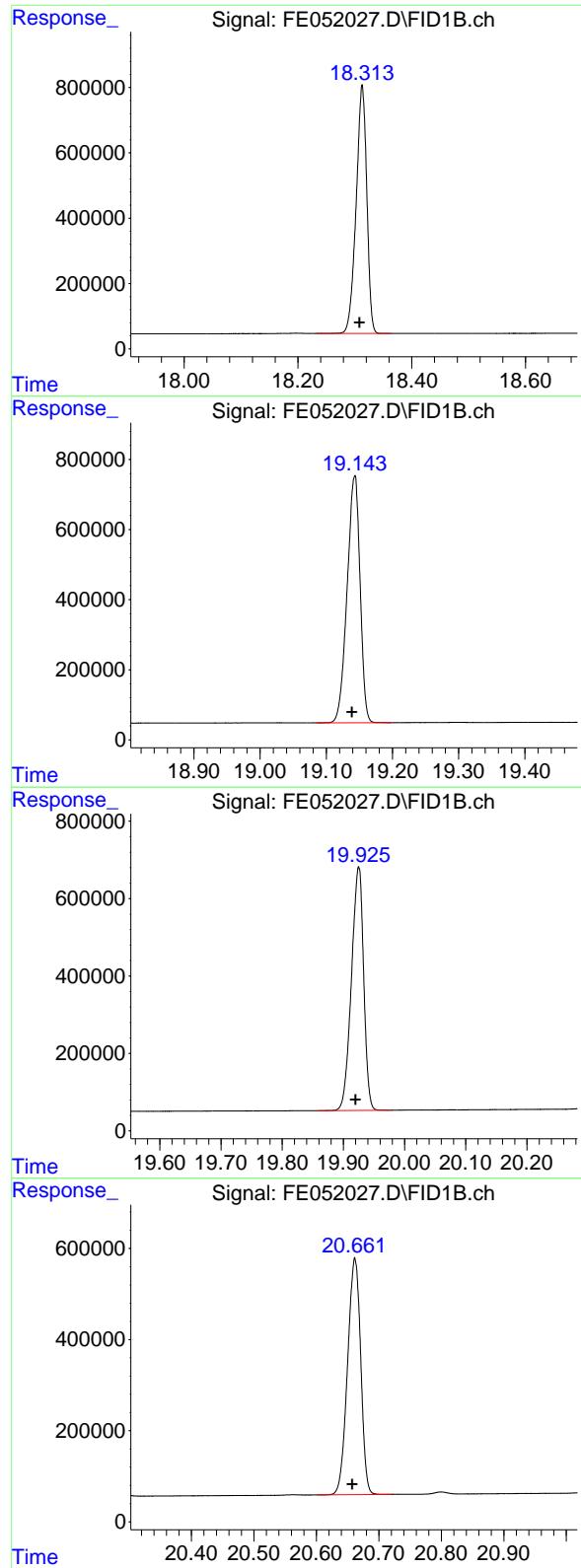
R.T.: 15.465 min  
 Delta R.T.: 0.004 min  
 Response: 10358861  
 Conc: 100.27 ug/ml

### #11 N-HEXACOSANE

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

### #12 N-OCTACOSANE

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



## #13 N-TRIACONTANE

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

Instrument: FID\_E  
 ClientSampleId : 100 TRPH STD

## #14 N-DOTRIACONTANE

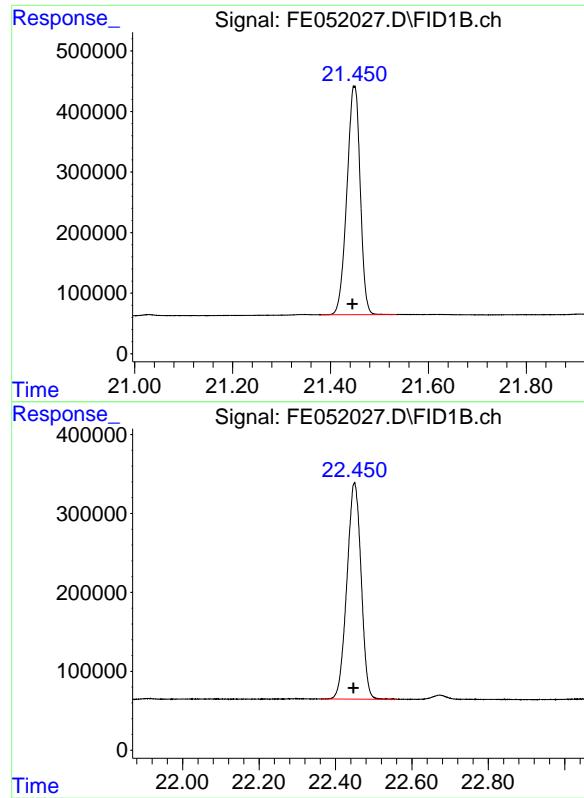
R.T.: 19.143 min  
 Delta R.T.: 0.004 min  
 Response: 9582276  
 Conc: 99.15 ug/ml

## #15 N-TETRATRIACONTANE

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

## #16 N-HEXATRIACONTANE

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



#17 N-OCTATRIACONTANE

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

Instrument:

FID\_E

ClientSampleId :

100 TRPH STD

#18 N-TETRACONTANE

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

## Report

rteres

Area Percent

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

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID\_E\methods\FE012325.M  
Title :

Signal : FID1B.ch

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

Sum of corrected areas: 168453064

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

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

**Instrument :**  
**FID\_E**  
**ClientSampleId :**  
**50 TRPH STD**

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

Volume Inj. : 1uL  
 Signal Phase : Rx1-1ms  
 Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc	Units
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**System Monitoring Compounds**

9) S TETRACOSANE-d50 (SURR...	15.257	4655317	50.000	ug/ml
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**Target Compounds**

1) N-OCTANE	2.412	4040248	50.000	ug/ml
2) N-DECANE	4.907	4328284	50.000	ug/ml
3) N-DODECANE	7.036	4713212	50.000	ug/ml
4) N-TETRADECANE	8.842	4775185	50.000	ug/ml
5) N-HEXADECANE	10.436	4988963	50.000	ug/ml
6) N-OCTADECANE	11.869	5246868	50.000	ug/ml
7) N-EICOSANE	13.171	5196311	50.000	ug/ml
8) N-DOCOSANE	14.362	5172075	50.000	ug/ml
10) N-TETRACOSANE	15.461	5165286	50.000	ug/ml
11) N-HEXADECANE	16.477	5089619	50.000	ug/ml
12) N-OCTACOSANE	17.424	5035229	50.000	ug/ml
13) N-TRIACONTANE	18.308	4974786	50.000	ug/ml
14) N-DOTRIACONTANE	19.139	4832453	50.000	ug/ml
15) N-TETRATRIACONTANE	19.920	4342985	50.000	ug/ml
16) N-HEXATRIACONTANE	20.657	3725450	50.000	ug/ml
17) N-OCTATRIACONTANE	21.445	3442776	50.000	ug/ml
18) N-TETRACONTANE	22.447	3364772	50.000	ug/ml

(f)=RT Delta > 1/2 Window

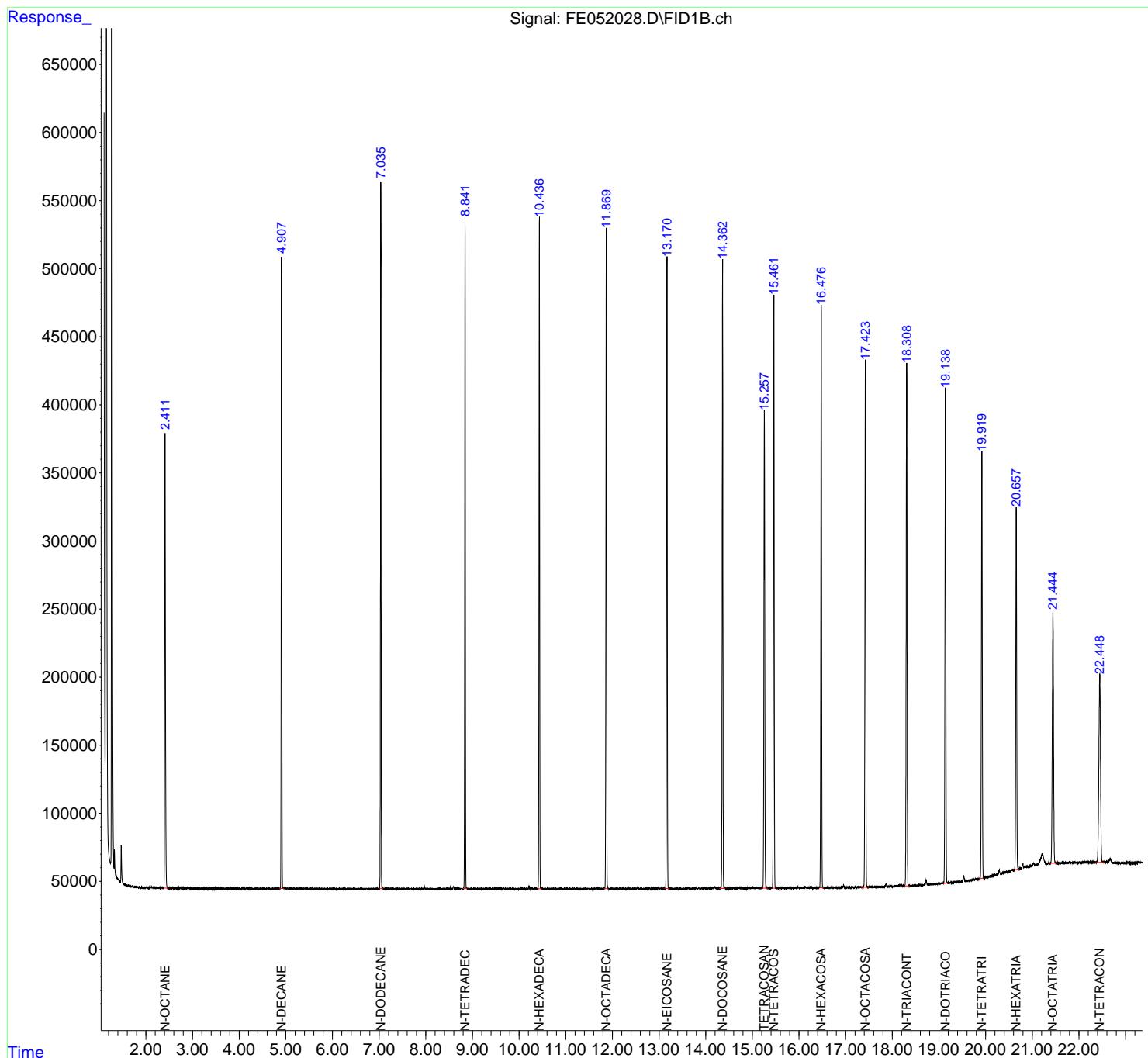
(m)=manual int.

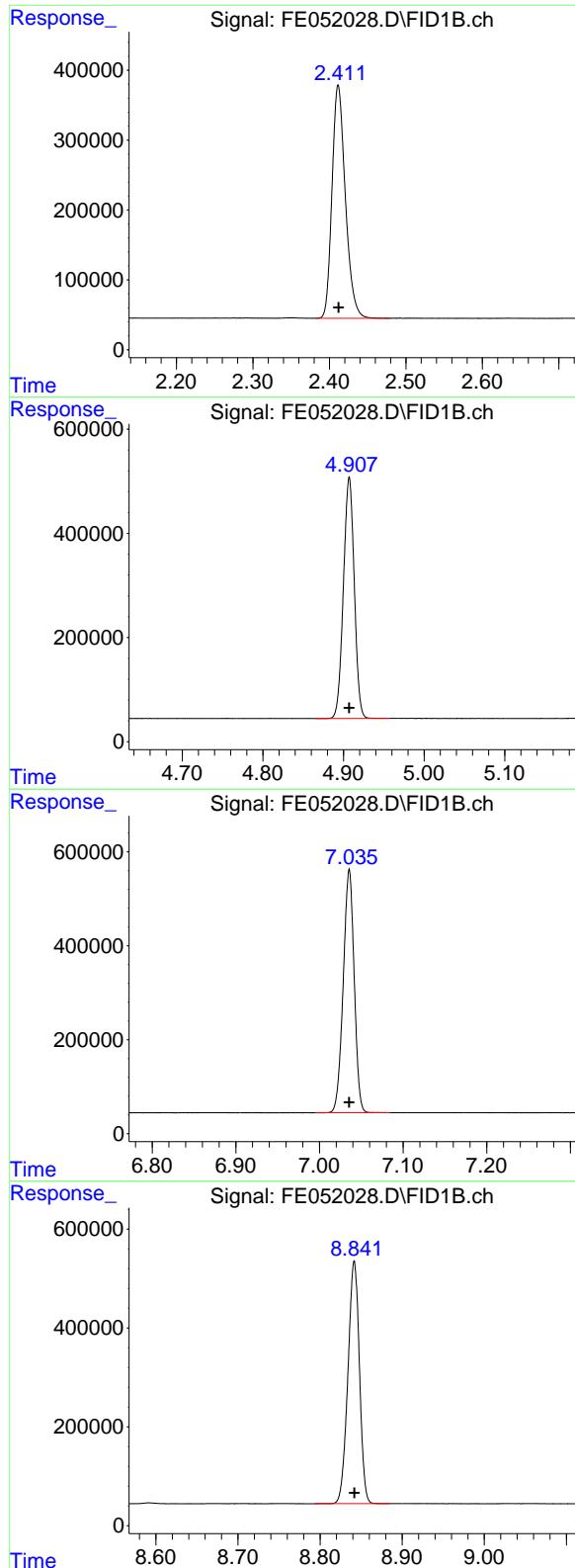
Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_E\Data\FE012325\  
 Data File : FE052028.D  
 Signal(s) : FID1B.ch  
 Acq On : 23 Jan 2025 23:06  
 Operator : YP\AJ  
 Sample : 50 TRPH STD  
 Misc :  
 ALS Vial : 23 Sample Multiplier: 1

**Instrument :**  
**FID\_E**  
**ClientSampleId :**  
**50 TRPH STD**

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

Volume Inj. : 1uL  
 Signal Phase : Rx1-1ms  
 Signal Info : 20mx0.18mmx0.18um





### #1 N-OCTANE

R.T.: 2.412 min  
 Delta R.T.: 0.000 min **Instrument:**  
 Response: 4040248 FID\_E  
 Conc: 50.00 ug/ml **ClientSampleId:**  
 50 TRPH STD

### #2 N-DECANE

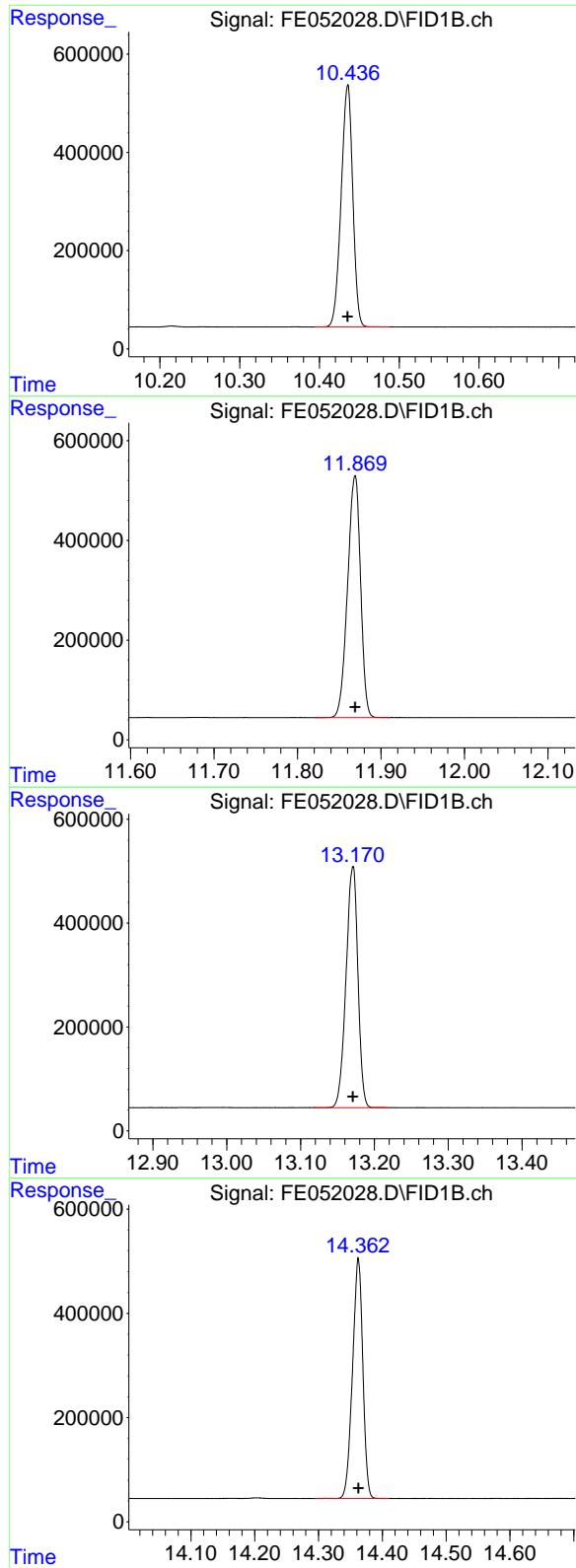
R.T.: 4.907 min  
 Delta R.T.: 0.000 min  
 Response: 4328284  
 Conc: 50.00 ug/ml

### #3 N-DODECANE

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

### #4 N-TETRADECANE

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



#### #5 N-HEXADECANE

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

Instrument: FID\_E  
 ClientSampleId: 50 TRPH STD

#### #6 N-OCTADECANE

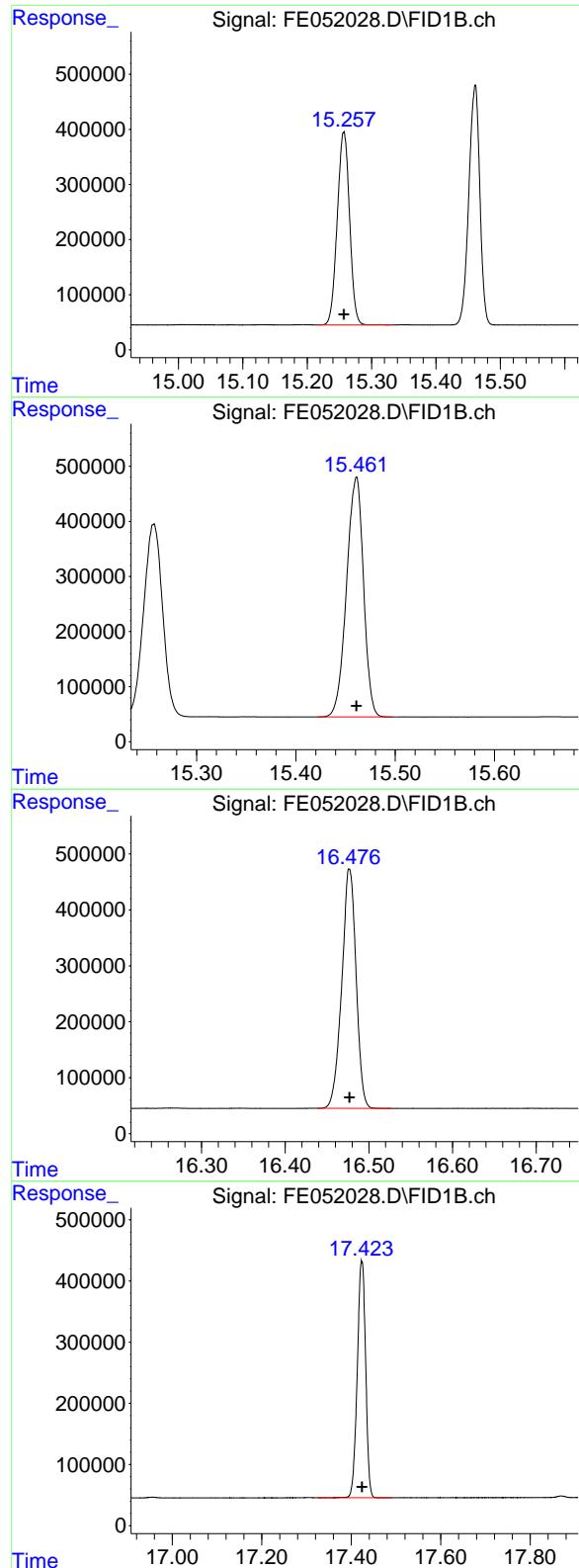
R.T.: 11.869 min  
 Delta R.T.: 0.000 min  
 Response: 5246868  
 Conc: 50.00 ug/ml

#### #7 N-EICOSANE

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

#### #8 N-DOCOSANE

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



### #9 TETRACOSANE-d50 (SURROGATE)

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

Instrument: FID\_E  
 ClientSampleId: 50 TRPH STD

### #10 N-TETRACOSANE

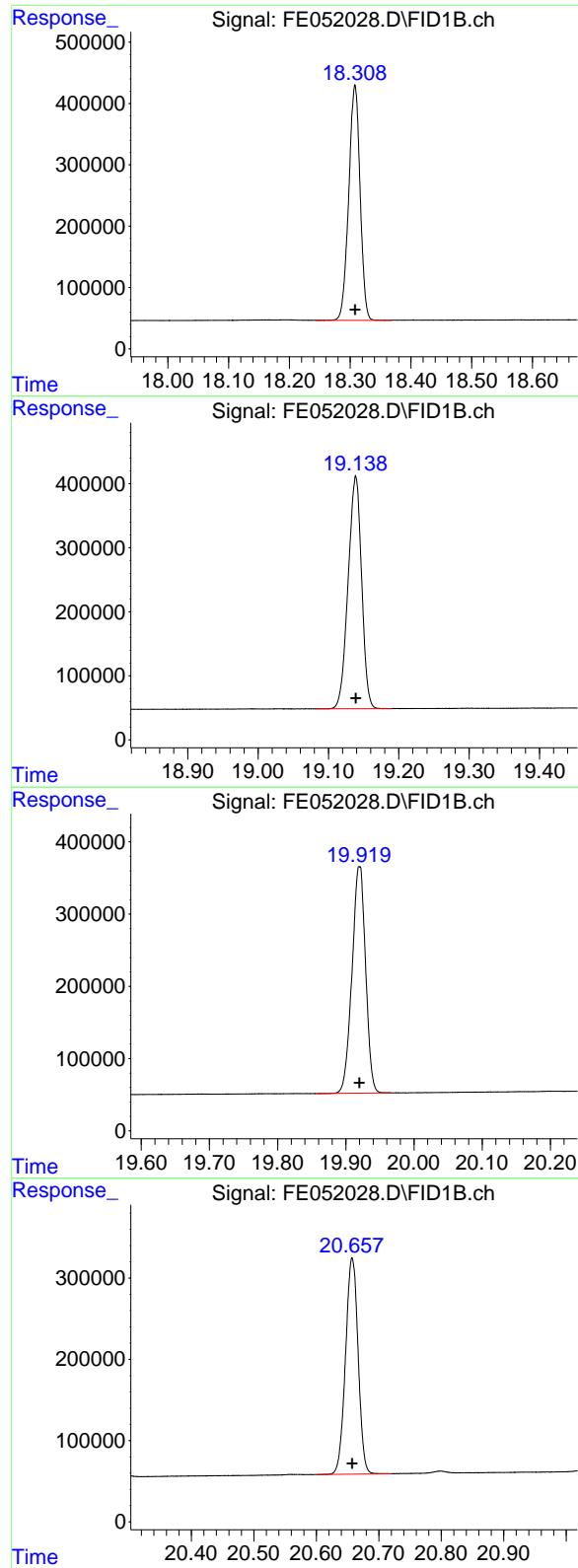
R.T.: 15.461 min  
 Delta R.T.: 0.000 min  
 Response: 5165286  
 Conc: 50.00 ug/ml

### #11 N-HEXACOSANE

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

### #12 N-OCTACOSANE

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



## #13 N-TRIACONTANE

R.T.: 18.308 min  
 Delta R.T.: 0.000 min **Instrument:**  
 Response: 4974786 FID\_E  
 Conc: 50.00 ug/ml **ClientSampleId:**  
 50 TRPH STD

## #14 N-DOTRIACONTANE

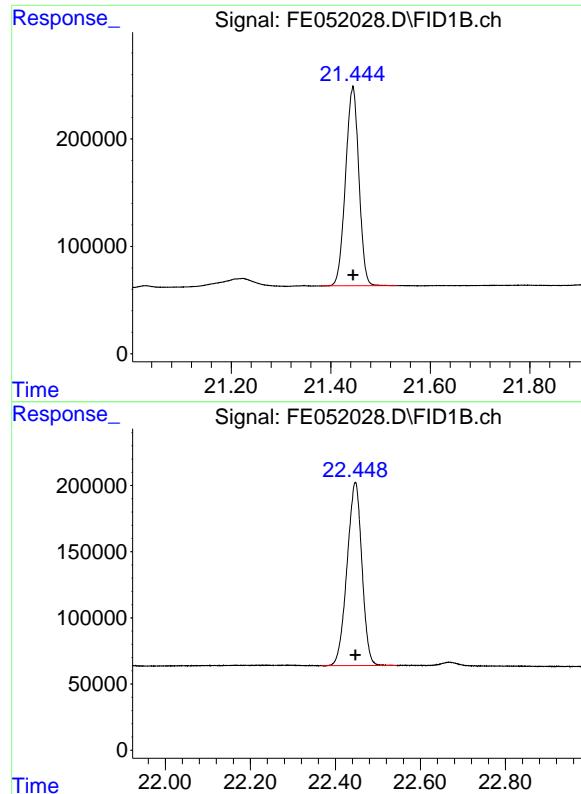
R.T.: 19.139 min  
 Delta R.T.: 0.000 min  
 Response: 4832453  
 Conc: 50.00 ug/ml

## #15 N-TETRATRIACONTANE

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

## #16 N-HEXATRIACONTANE

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



#17 N-OCTATRIACONTANE

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

Instrument: FID\_E  
ClientSampleId: 50 TRPH STD

#18 N-TETRACONTANE

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

## Report

rteres

Area Percent

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_E\Data\FE012325\  
Data File : FE052028.D  
Signal (s) : FID1B.ch  
Acq On : 23 Jan 2025 23:06  
Sample : 50 TRPH STD  
Mi SC  
ALS Vil al : 23 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID\_E\methods\FE012325.M  
Title :

Signal : FID1B.ch

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

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

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

**Instrument :**  
**FID\_E**  
**ClientSampleId :**  
**20 TRPH STD**

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

Volume Inj. : 1uL  
 Signal Phase : Rx1-1ms  
 Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc	Units
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**System Monitoring Compounds**

9) S TETRACOSANE-d50 (SURR...	15.254	1967122	21.128	ug/ml
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**Target Compounds**

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

(f)=RT Delta > 1/2 Window

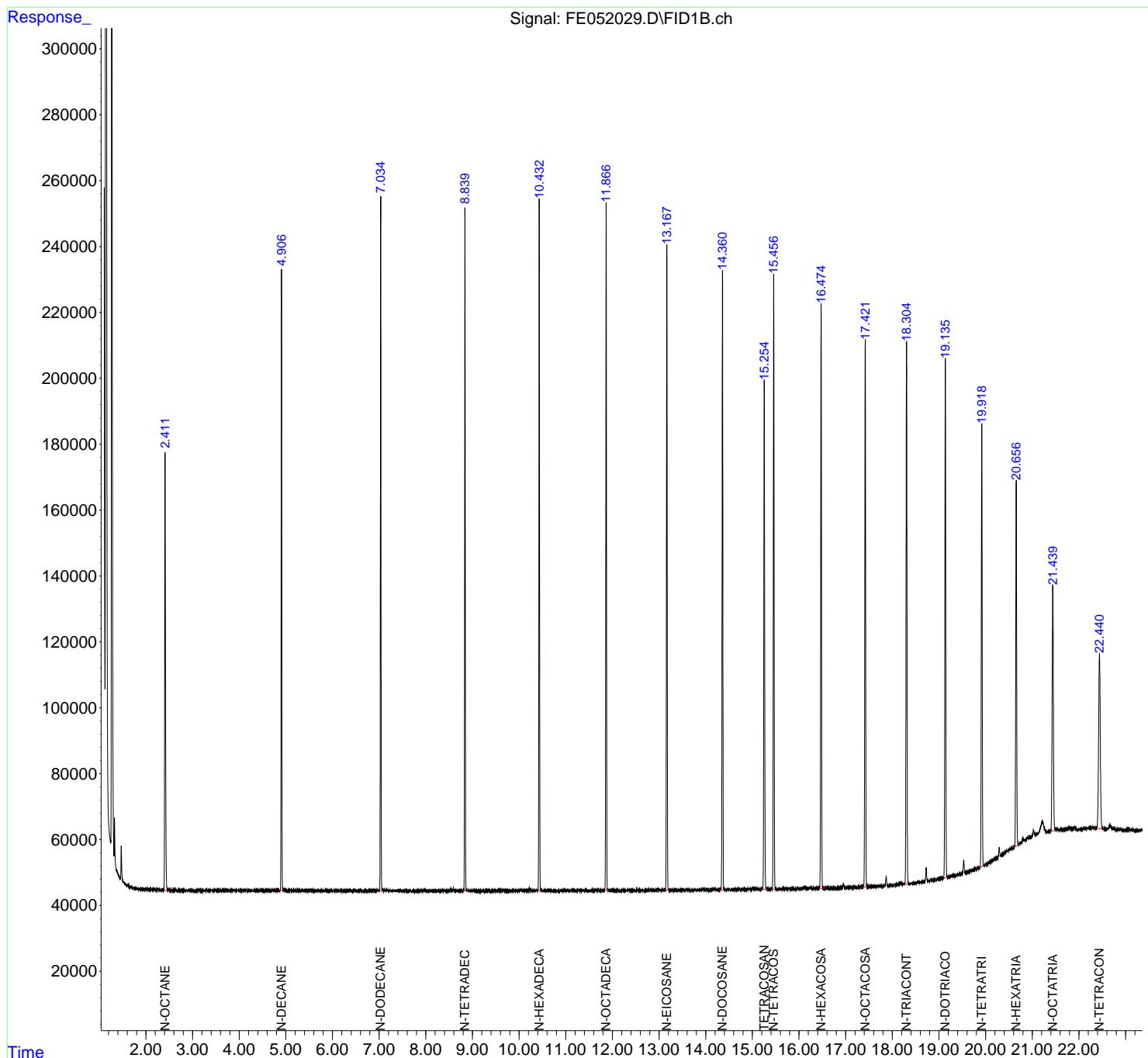
(m)=manual int.

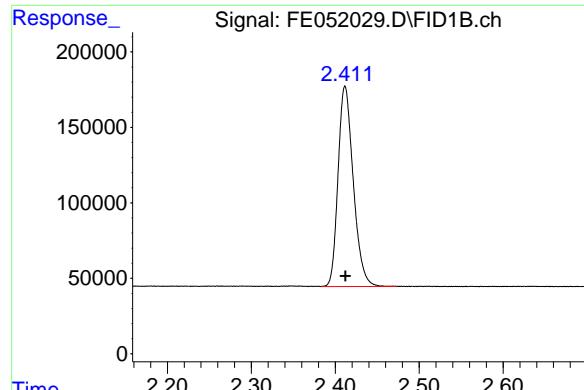
Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_E\Data\FE012325\  
 Data File : FE052029.D  
 Signal(s) : FID1B.ch  
 Acq On : 23 Jan 2025 23:36  
 Operator : YP\AJ  
 Sample : 20 TRPH STD  
 Misc :  
 ALS Vial : 24 Sample Multiplier: 1

**Instrument :**  
**FID\_E**  
**ClientSampleId :**  
**20 TRPH STD**

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

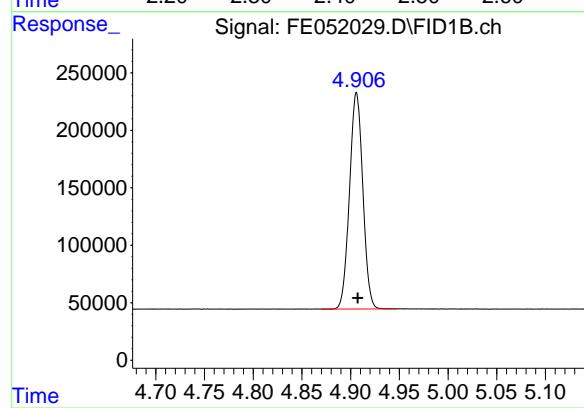
Volume Inj. : 1uL  
 Signal Phase : Rx1-1ms  
 Signal Info : 20mx0.18mmx0.18um





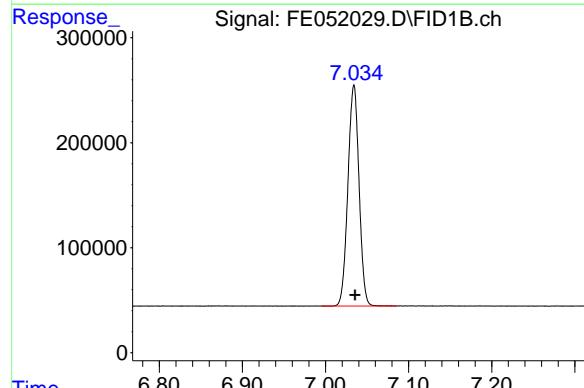
#1 N-OCTANE

R.T.: 2.412 min  
Delta R.T.: 0.000 min Instrument:  
Response: 1671507 FID\_E  
Conc: 20.69 ug/ml ClientSampleId :  
20 TRPH STD



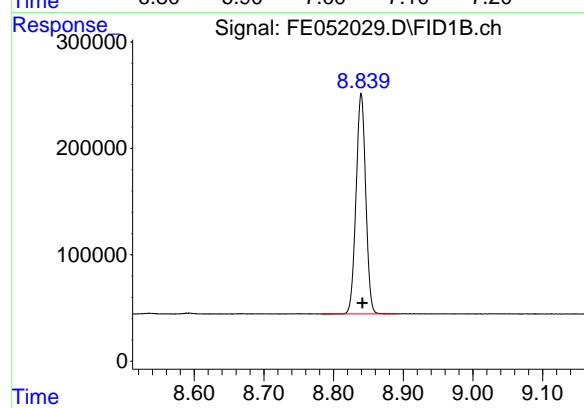
#2 N-DECANE

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



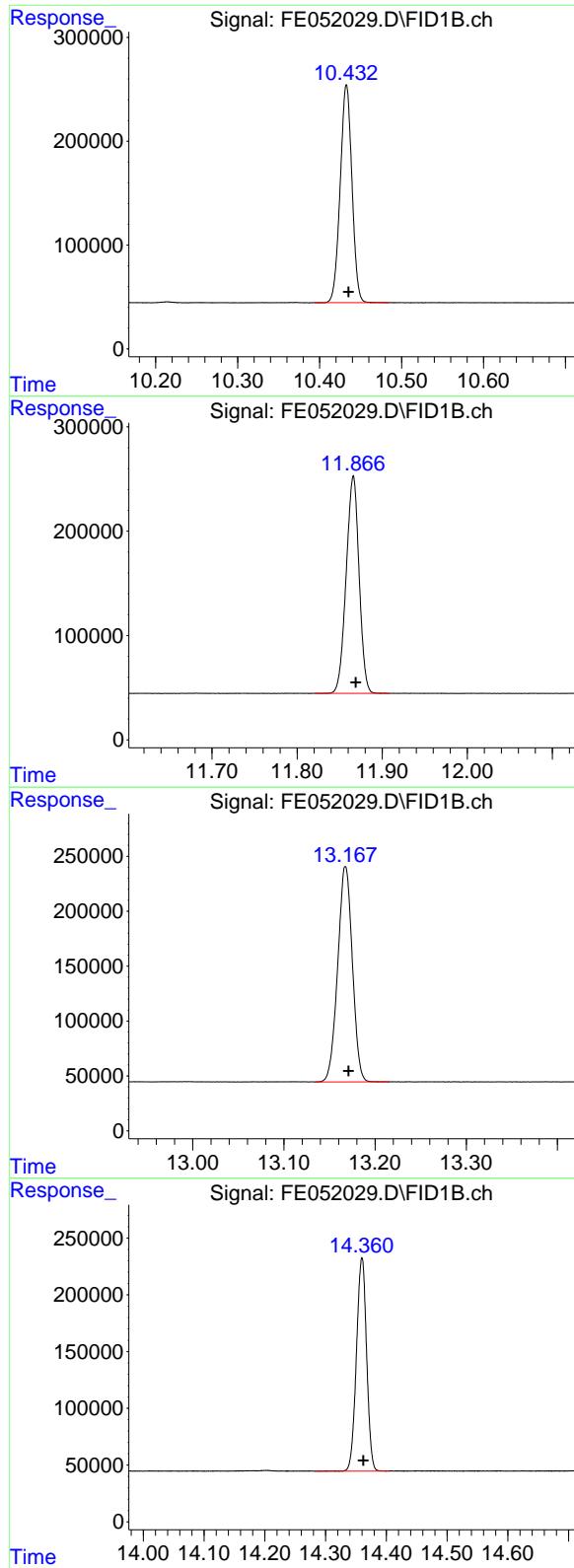
#3 N-DODECANE

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



#4 N-TETRADECANE

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



## #5 N-HEXADECANE

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

Instrument: FID\_E  
 ClientSampleId: 20 TRPH STD

## #6 N-OCTADECANE

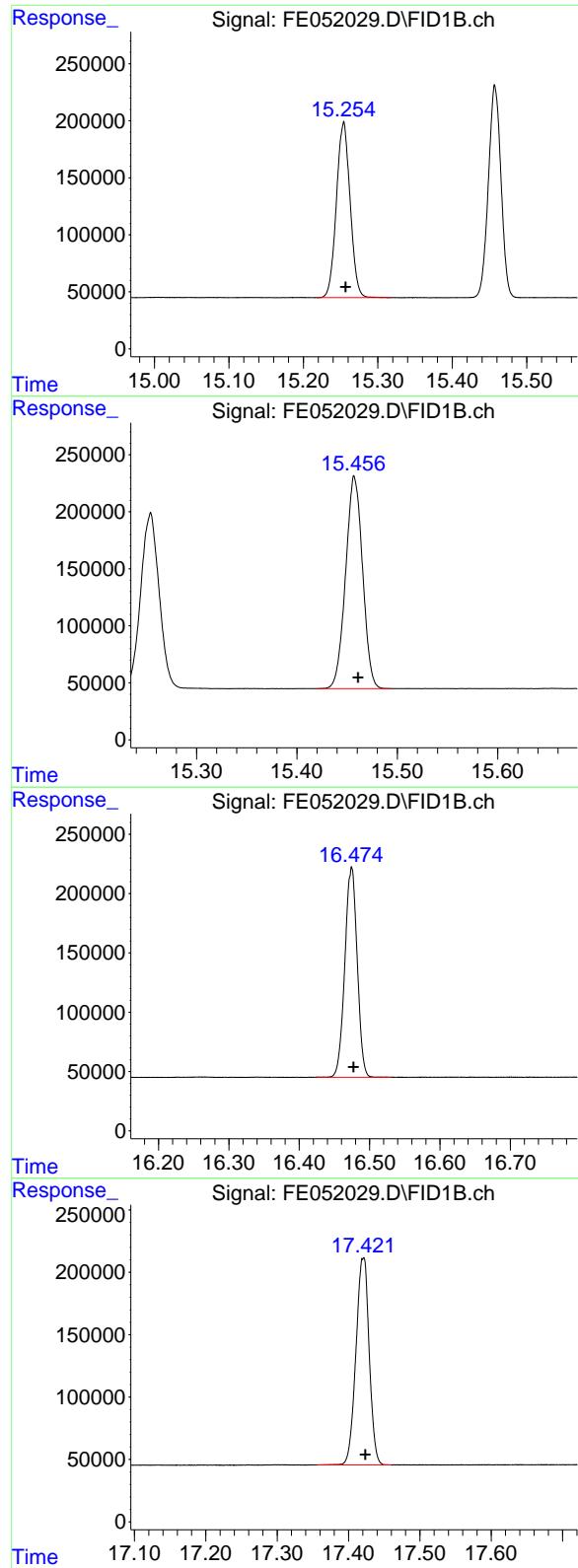
R.T.: 11.866 min  
 Delta R.T.: -0.003 min  
 Response: 2202071  
 Conc: 20.98 ug/ml

## #7 N-EICOSANE

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

## #8 N-DOCOSANE

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



#### #9 TETRACOSANE-d50 (SURROGATE)

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

Instrument: FID\_E  
 ClientSampleId: 20 TRPH STD

#### #10 N-TETRACOSANE

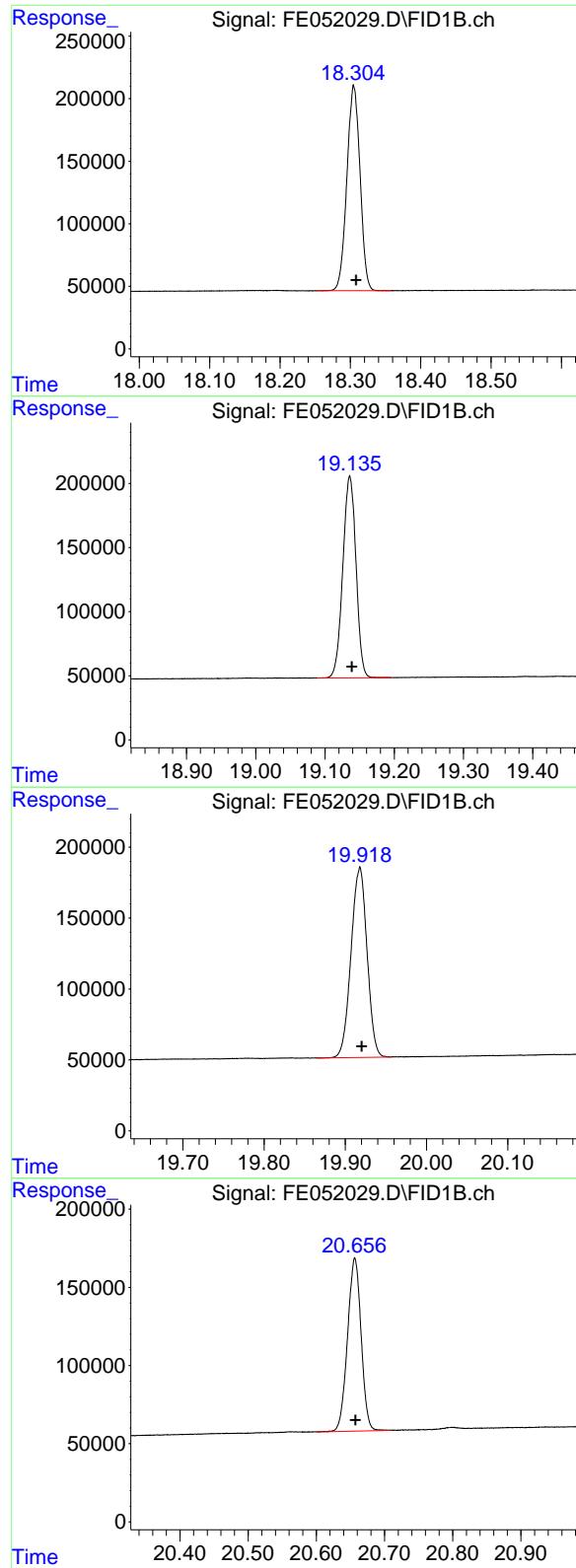
R.T.: 15.457 min  
 Delta R.T.: -0.004 min  
 Response: 2185765  
 Conc: 21.16 ug/ml

#### #11 N-HEXACOSANE

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

#### #12 N-OCTACOSANE

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



## #13 N-TRIACONTANE

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

Instrument: FID\_E  
 ClientSampleId: 20 TRPH STD

## #14 N-DOTRIACONTANE

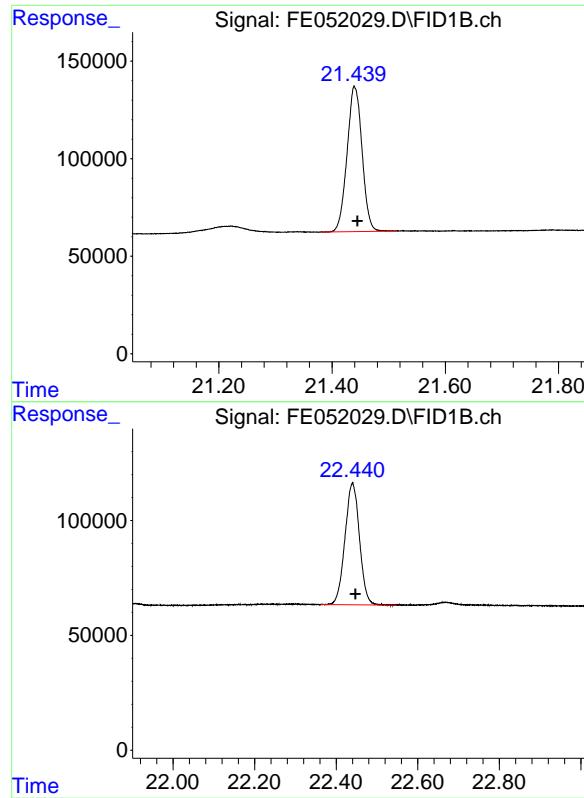
R.T.: 19.136 min  
 Delta R.T.: -0.003 min  
 Response: 2078753  
 Conc: 21.51 ug/ml

## #15 N-TETRATRIACONTANE

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

## #16 N-HEXATRIACONTANE

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



#17 N-OCTATRIACONTANE

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

Instrument: FID\_E  
ClientSampleId: 20 TRPH STD

#18 N-TETRACONTANE

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

## Report

rteres

Area Percent

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

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID\_E\methods\FE012325.M  
Title :

Signal : FID1B.ch

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

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

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

**Instrument :**  
**FID\_E**  
**ClientSampleId :**  
**10 TRPH STD**

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

Volume Inj. : 1uL  
 Signal Phase : Rx1-1ms  
 Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc	Units
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**System Monitoring Compounds**

9) S TETRACOSANE-d50 (SURR... 15.253 1061033 11.396 ug/ml

**Target Compounds**

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

(f)=RT Delta > 1/2 Window

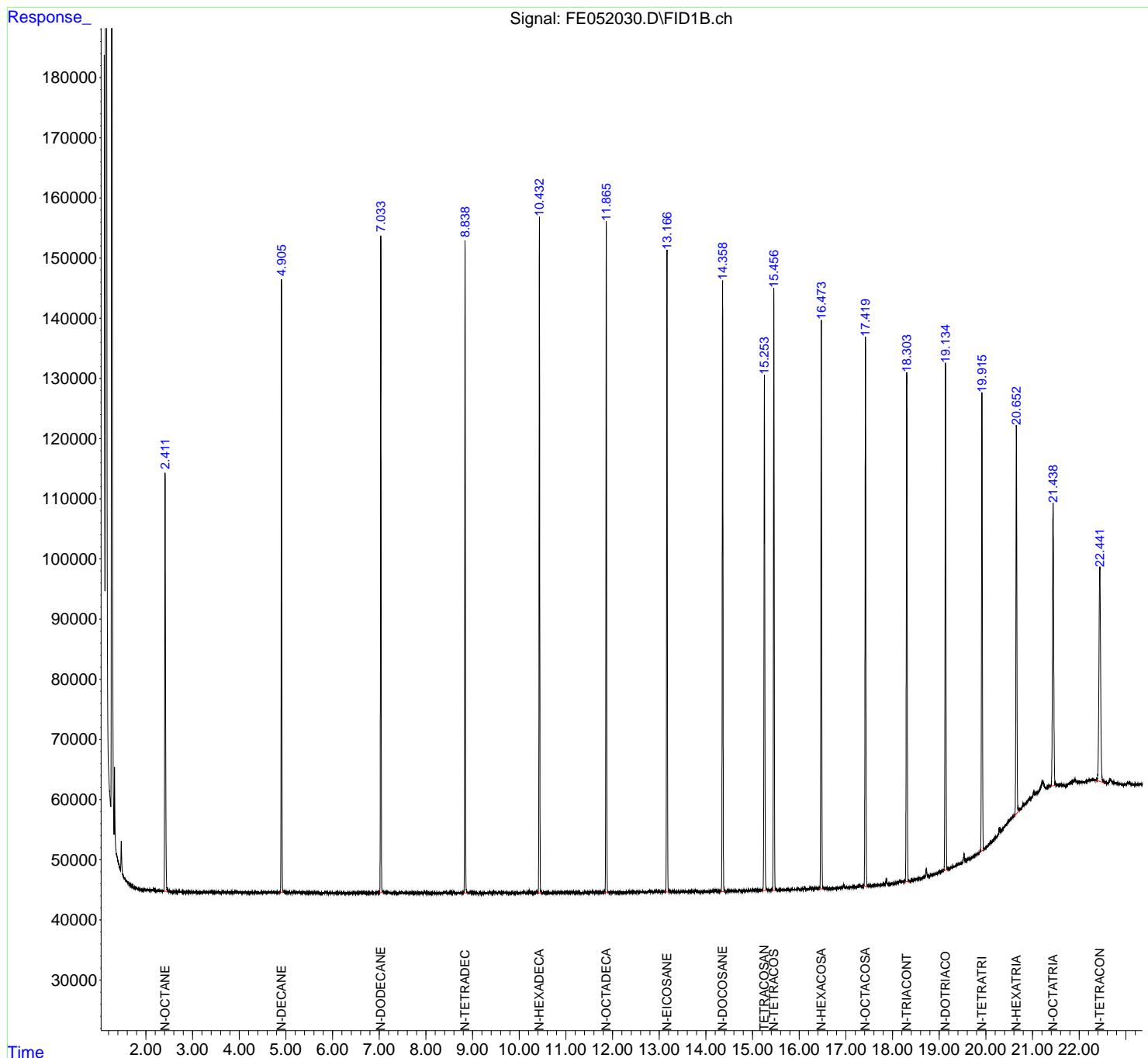
(m)=manual int.

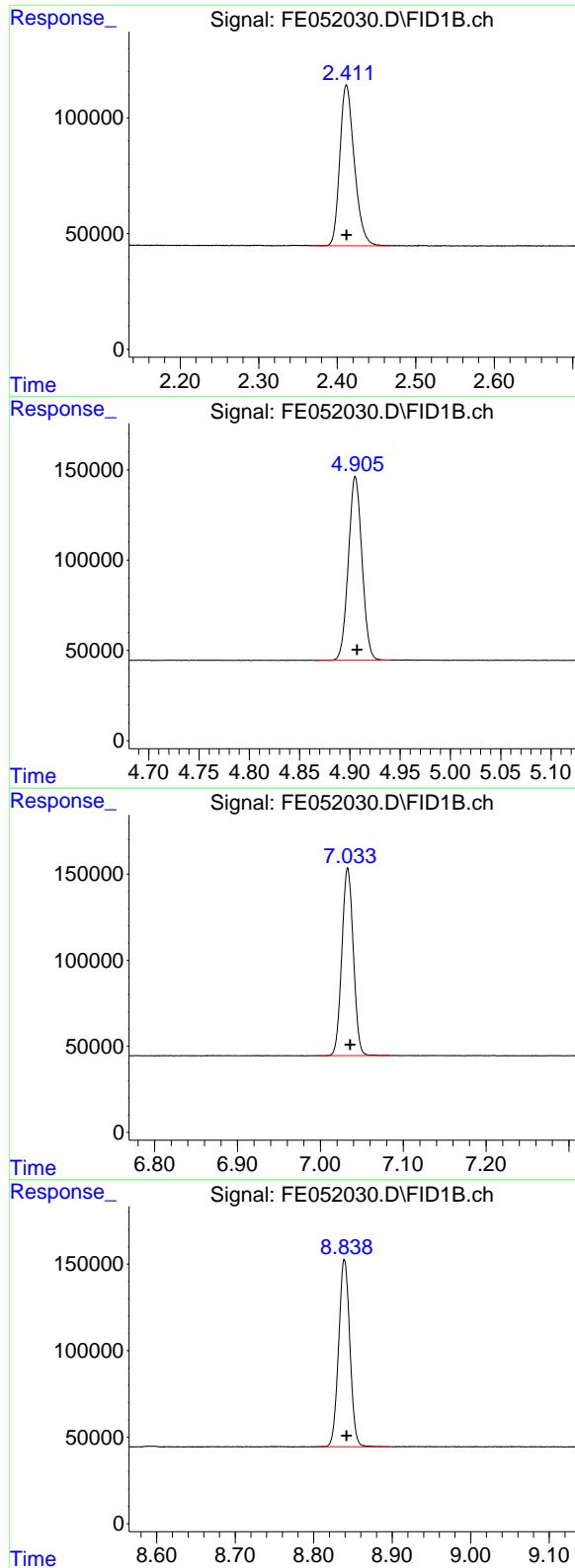
Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_E\Data\FE012325\  
 Data File : FE052030.D  
 Signal(s) : FID1B.ch  
 Acq On : 24 Jan 2025 00:06  
 Operator : YP\AJ  
 Sample : 10 TRPH STD  
 Misc :  
 ALS Vial : 25 Sample Multiplier: 1

**Instrument :**  
 FID\_E  
**ClientSampleId :**  
 10 TRPH STD

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

Volume Inj. : 1uL  
 Signal Phase : Rx1-1ms  
 Signal Info : 20mx0.18mmx0.18um





### #1 N-OCTANE

R.T.: 2.412 min  
 Delta R.T.: 0.000 min Instrument:  
 Response: 889828 FID\_E  
 Conc: 11.01 ug/ml ClientSampleId :  
 10 TRPH STD

### #2 N-DECANE

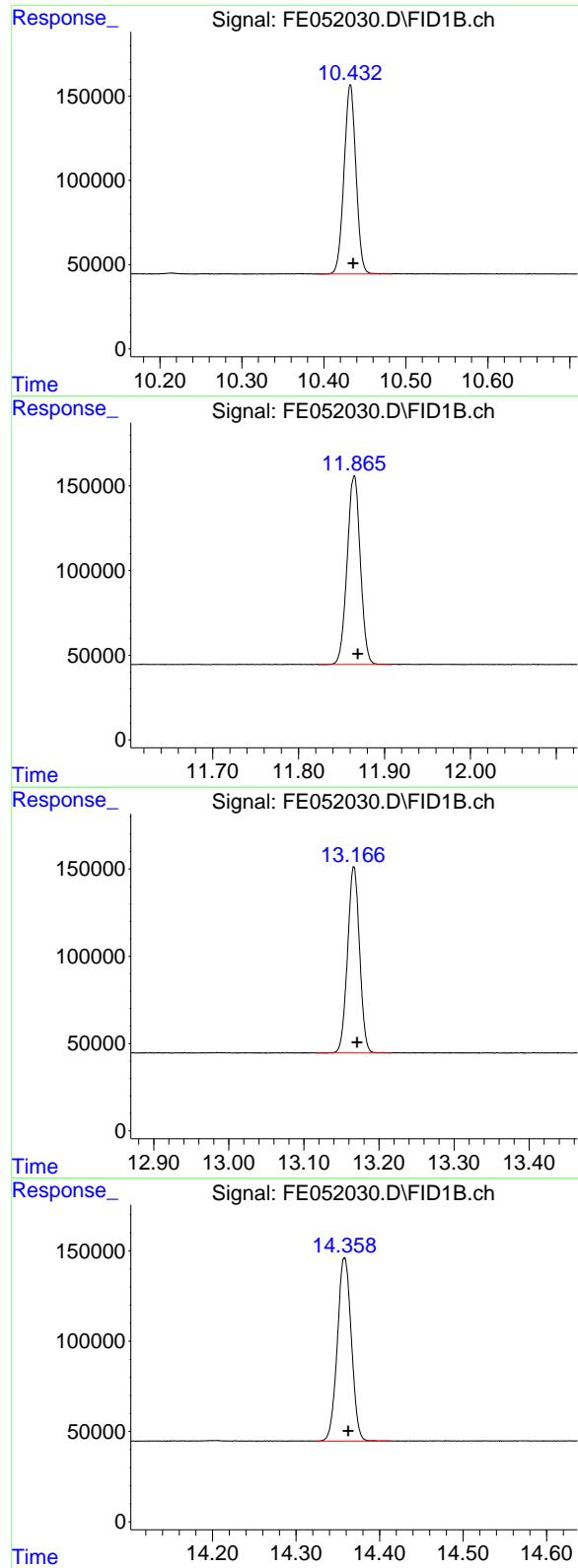
R.T.: 4.906 min  
 Delta R.T.: -0.002 min  
 Response: 959030  
 Conc: 11.08 ug/ml

### #3 N-DODECANE

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

### #4 N-TETRADECANE

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



## #5 N-HEXADECANE

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

Instrument: FID\_E  
 ClientSampleId: 10 TRPH STD

## #6 N-OCTADECANE

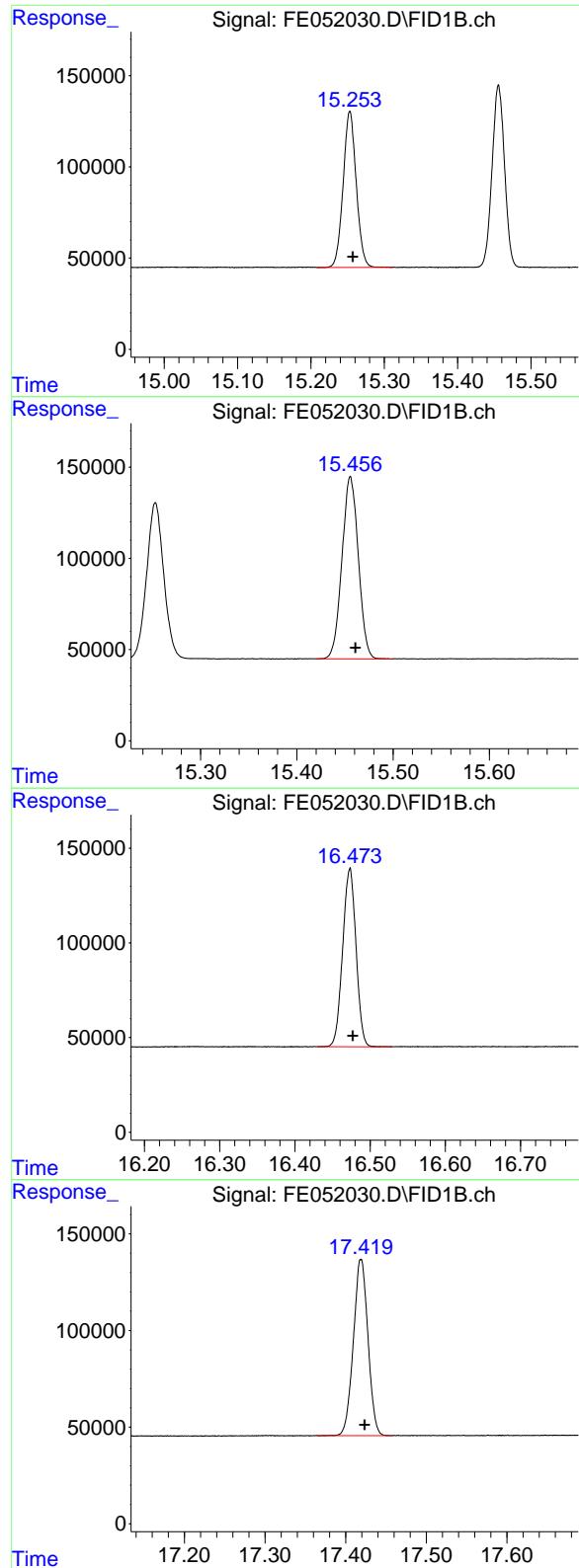
R.T.: 11.865 min  
 Delta R.T.: -0.004 min  
 Response: 1193205  
 Conc: 11.37 ug/ml

## #7 N-EICOSANE

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

## #8 N-DOCOSANE

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



### #9 TETRACOSANE-d50 (SURROGATE)

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

Instrument: FID\_E  
 ClientSampleId: 10 TRPH STD

### #10 N-TETRACOSANE

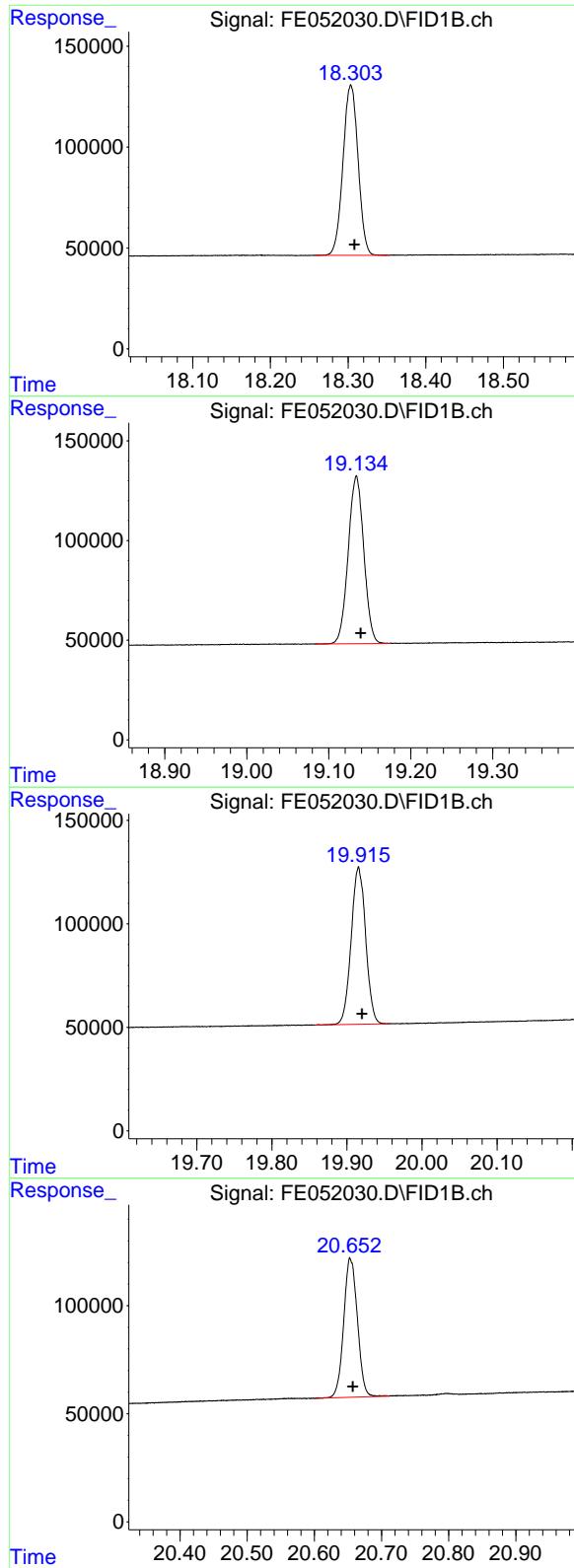
R.T.: 15.456 min  
 Delta R.T.: -0.005 min  
 Response: 1180708  
 Conc: 11.43 ug/ml

### #11 N-HEXACOSANE

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

### #12 N-OCTACOSANE

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



### #13 N-TRIACONTANE

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

Instrument: FID\_E  
 ClientSampleId: 10 TRPH STD

### #14 N-DOTRIACONTANE

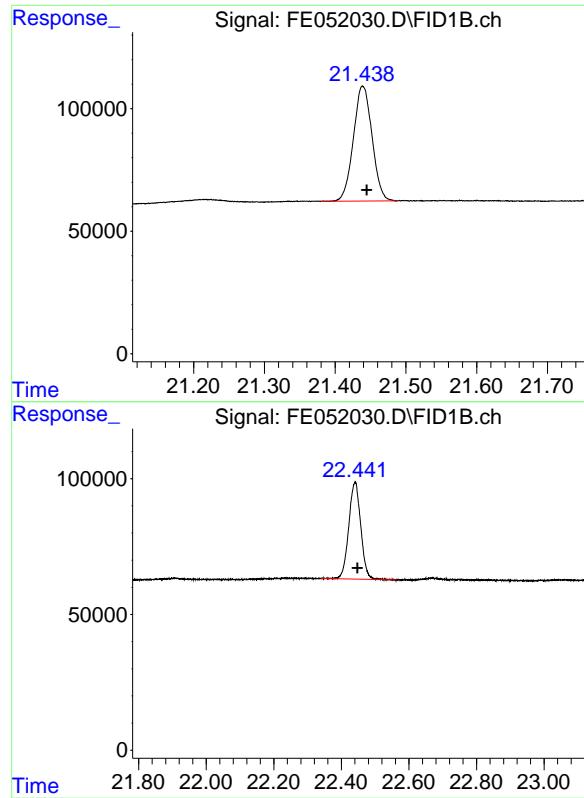
R.T.: 19.134 min  
 Delta R.T.: -0.005 min  
 Response: 1110748  
 Conc: 11.49 ug/ml

### #15 N-TETRATRIACONTANE

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

### #16 N-HEXATRIACONTANE

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



## #17 N-OCTATRIACONTANE

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

Instrument: FID\_E  
ClientSampleId: 10 TRPH STD

## #18 N-TETRACONTANE

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

## Report

rteres

Area Percent

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

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID\_E\methods\FE012325.M  
Title :

Signal : FID1B.ch

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

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

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

**Instrument :**  
**FID\_E**  
**ClientSampleId :**  
**5 TRPH STD**

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

Volume Inj. : 1uL  
 Signal Phase : Rx1-1ms  
 Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc	Units
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**System Monitoring Compounds**

9) S TETRACOSANE-d50 (SURR... 15.253 535796 5.755 ug/ml

**Target Compounds**

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

(f)=RT Delta > 1/2 Window

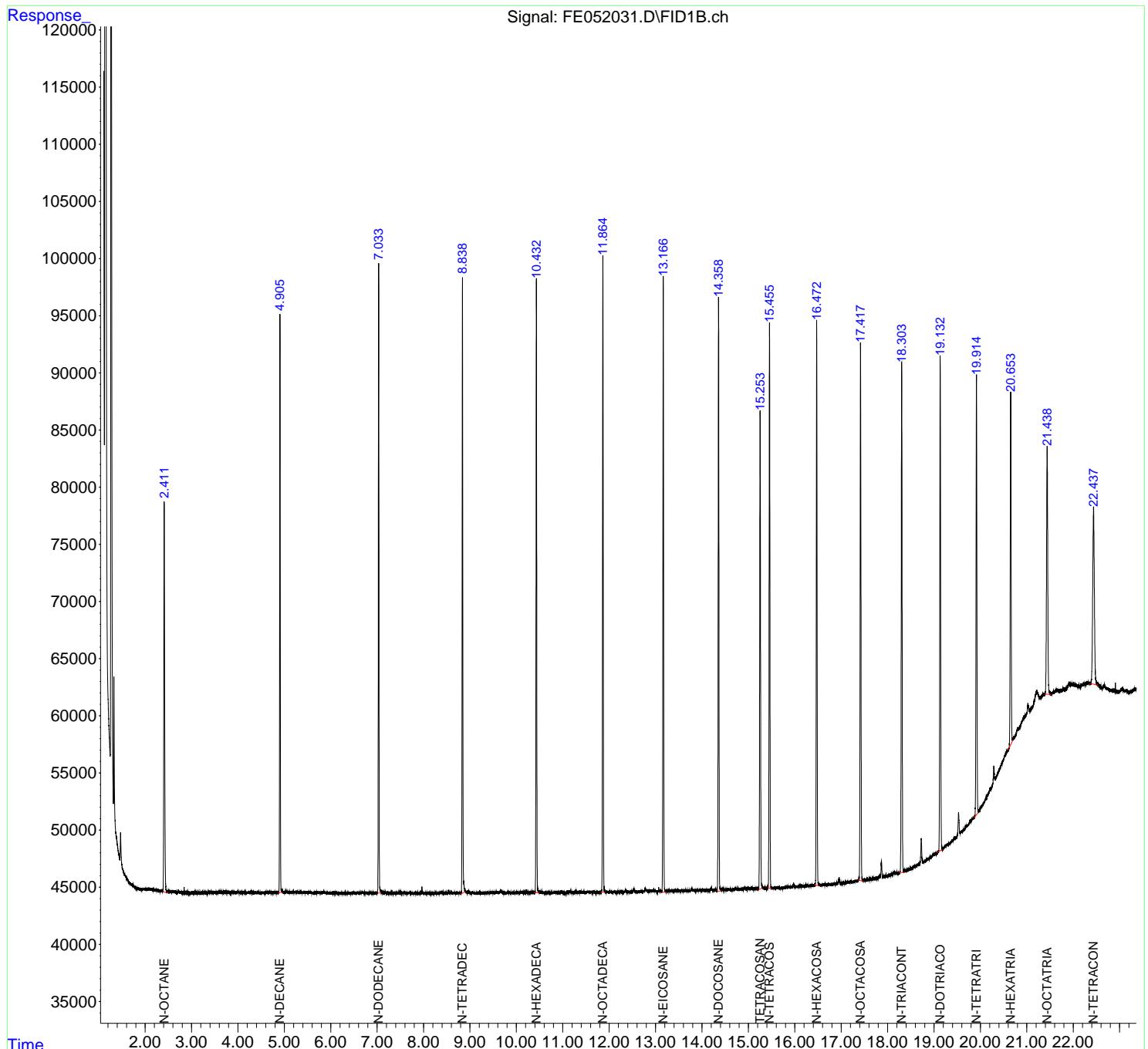
(m)=manual int.

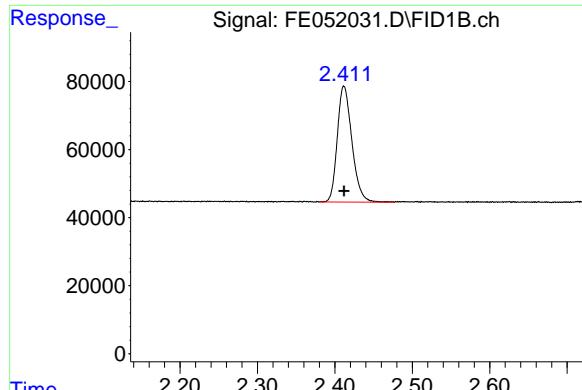
Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_E\Data\FE012325\  
 Data File : FE052031.D  
 Signal(s) : FID1B.ch  
 Acq On : 24 Jan 2025 00:36  
 Operator : YP\AJ  
 Sample : 5 TRPH STD  
 Misc :  
 ALS Vial : 26 Sample Multiplier: 1

**Instrument :**  
**FID\_E**  
**ClientSampleId :**  
**5 TRPH STD**

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

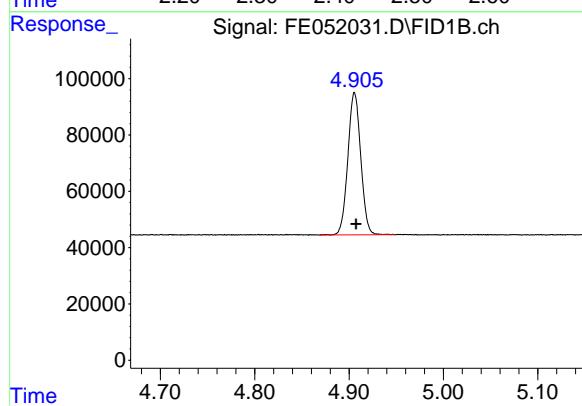
Volume Inj. : 1uL  
 Signal Phase : Rx1-1ms  
 Signal Info : 20mx0.18mmx0.18um





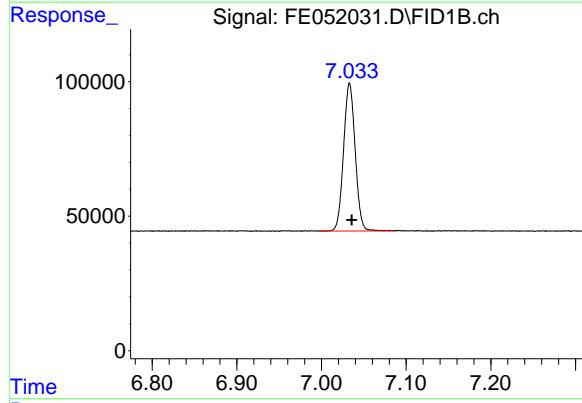
#1 N-OCTANE

R.T.: 2.412 min  
Delta R.T.: 0.000 min Instrument:  
Response: 447517 FID\_E  
Conc: 5.54 ug/ml ClientSampleId :  
5 TRPH STD



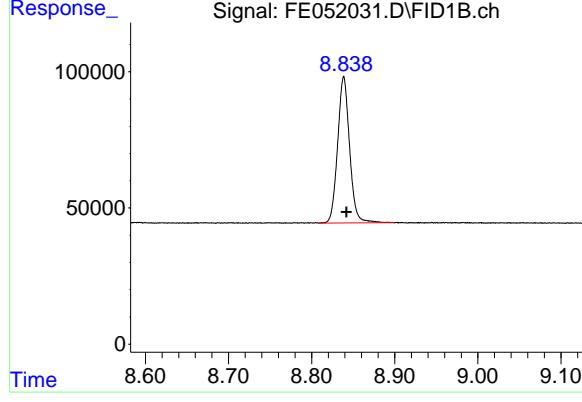
#2 N-DECANE

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



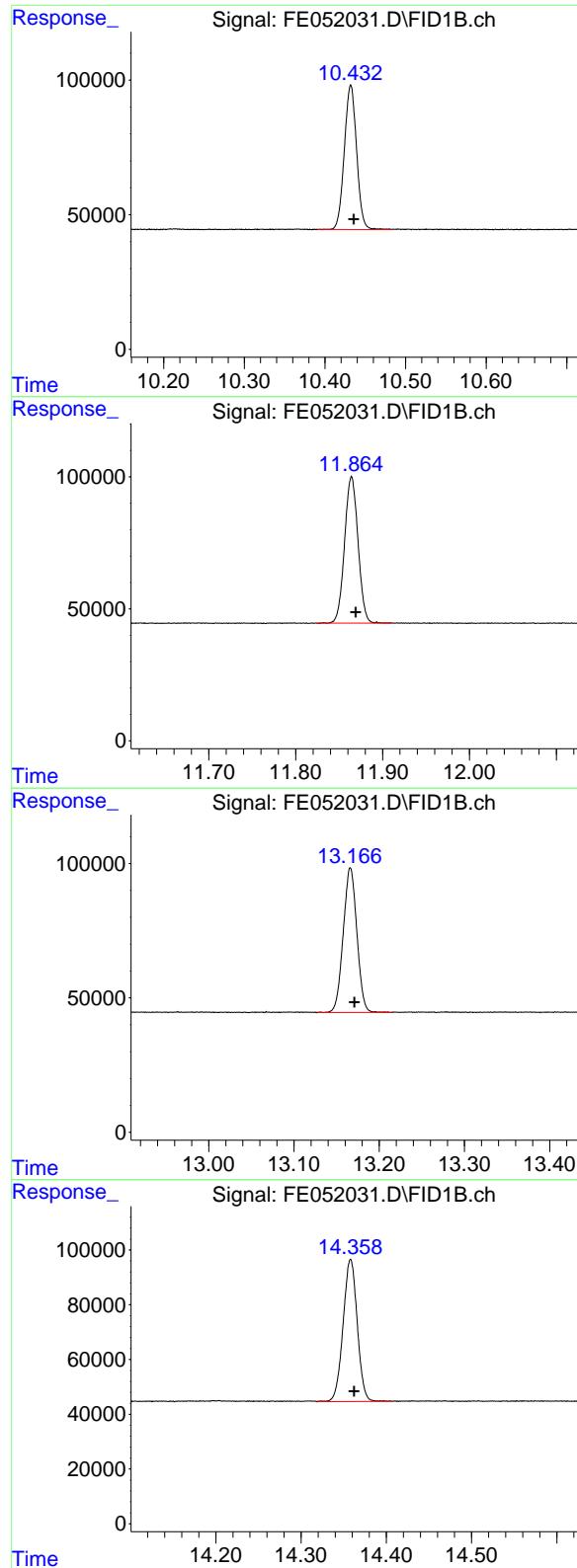
#3 N-DODECANE

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



#4 N-TETRADECANE

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



## #5 N-HEXADECANE

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

Instrument: FID\_E  
 ClientSampleId : 5 TRPH STD

## #6 N-OCTADECANE

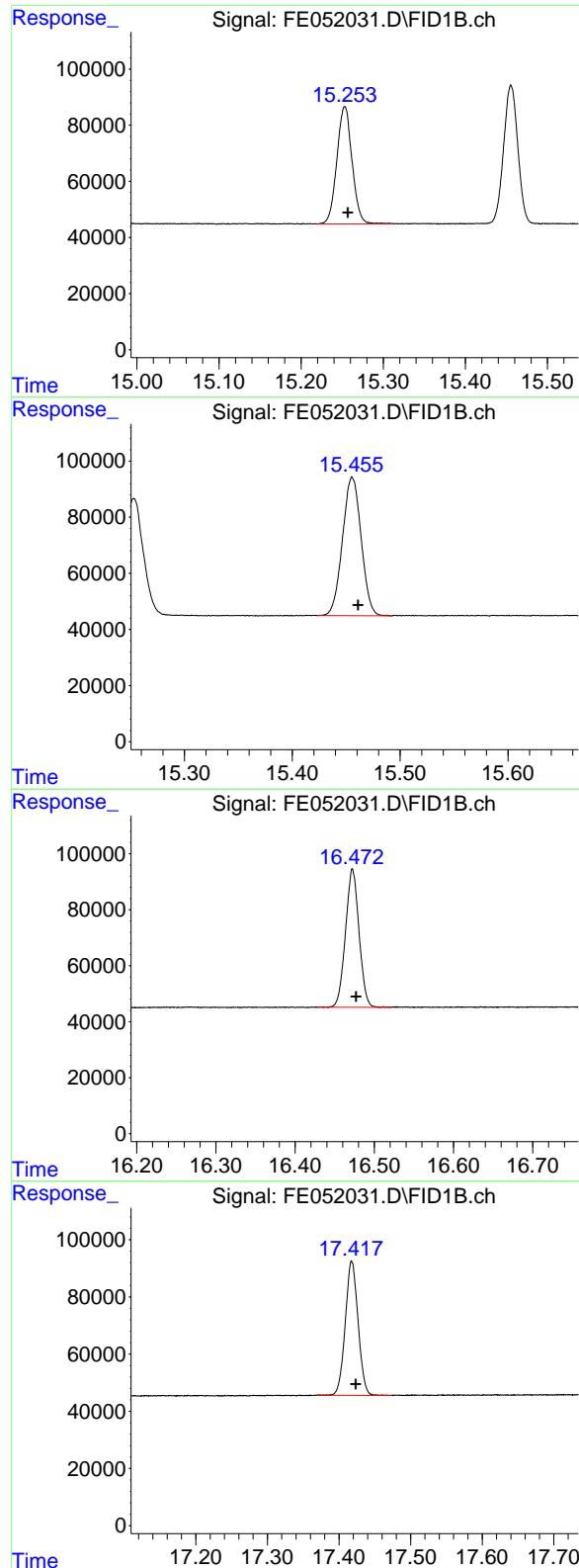
R.T.: 11.864 min  
 Delta R.T.: -0.005 min  
 Response: 597723  
 Conc: 5.70 ug/ml

## #7 N-EICOSANE

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

## #8 N-DOCOSANE

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



#### #9 TETRACOSANE-d50 (SURROGATE)

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

Instrument: FID\_E  
 ClientSampleId: 5 TRPH STD

#### #10 N-TETRACOSANE

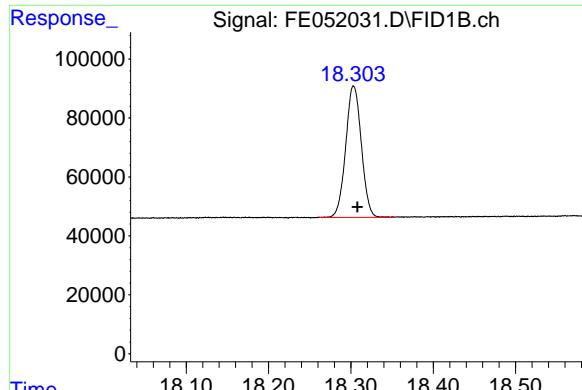
R.T.: 15.456 min  
 Delta R.T.: -0.005 min  
 Response: 594003  
 Conc: 5.75 ug/ml

#### #11 N-HEXACOSANE

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

#### #12 N-OCTACOSANE

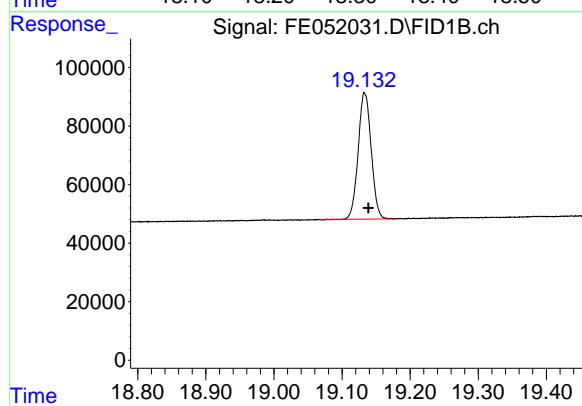
R.T.: 17.418 min  
 Delta R.T.: -0.006 min  
 Response: 583549  
 Conc: 5.79 ug/ml



## #13 N-TRIACONTANE

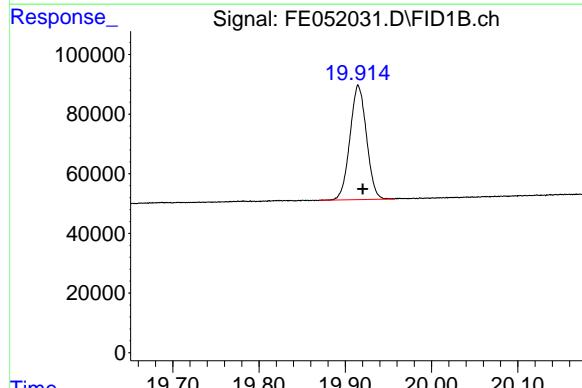
R.T.: 18.303 min  
Delta R.T.: -0.005 min  
Response: 588228  
Conc: 5.91 ug/ml

Instrument: FID\_E  
ClientSampleId: 5 TRPH STD



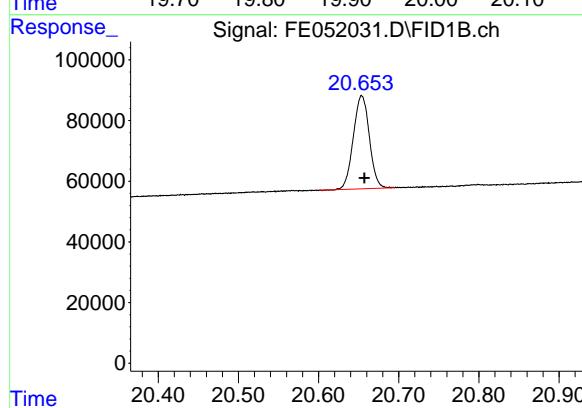
## #14 N-DOTRIACONTANE

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



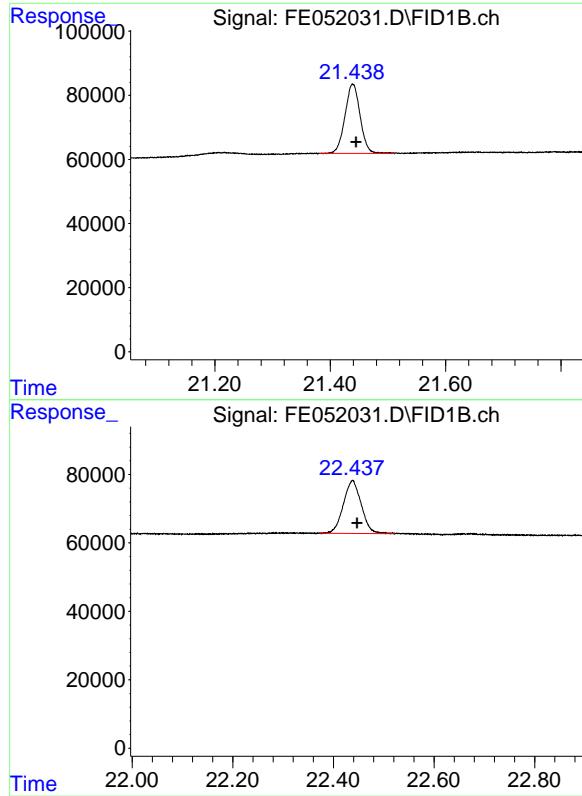
## #15 N-TETRATRIACONTANE

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



## #16 N-HEXATRIACONTANE

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



## #17 N-OCTATRIACONTANE

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

Instrument: FID\_E  
ClientSampleId: 5 TRPH STD

## #18 N-TETRACONTANE

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

## Report

rteres

Area Percent

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

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID\_E\methods\FE012325.M  
Title :

Signal : FID1B.ch

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

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

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

**Instrument :**  
**FID\_E**  
**ClientSampleId :**  
**FE012325ICV**

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

Volume Inj. : 1uL  
 Signal Phase : Rx1-1ms  
 Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc	Units
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**System Monitoring Compounds**

9) S TETRACOSANE-d50 (SURR... 15.256 4666211 46.850 ug/ml

**Target Compounds**

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

(f)=RT Delta > 1/2 Window

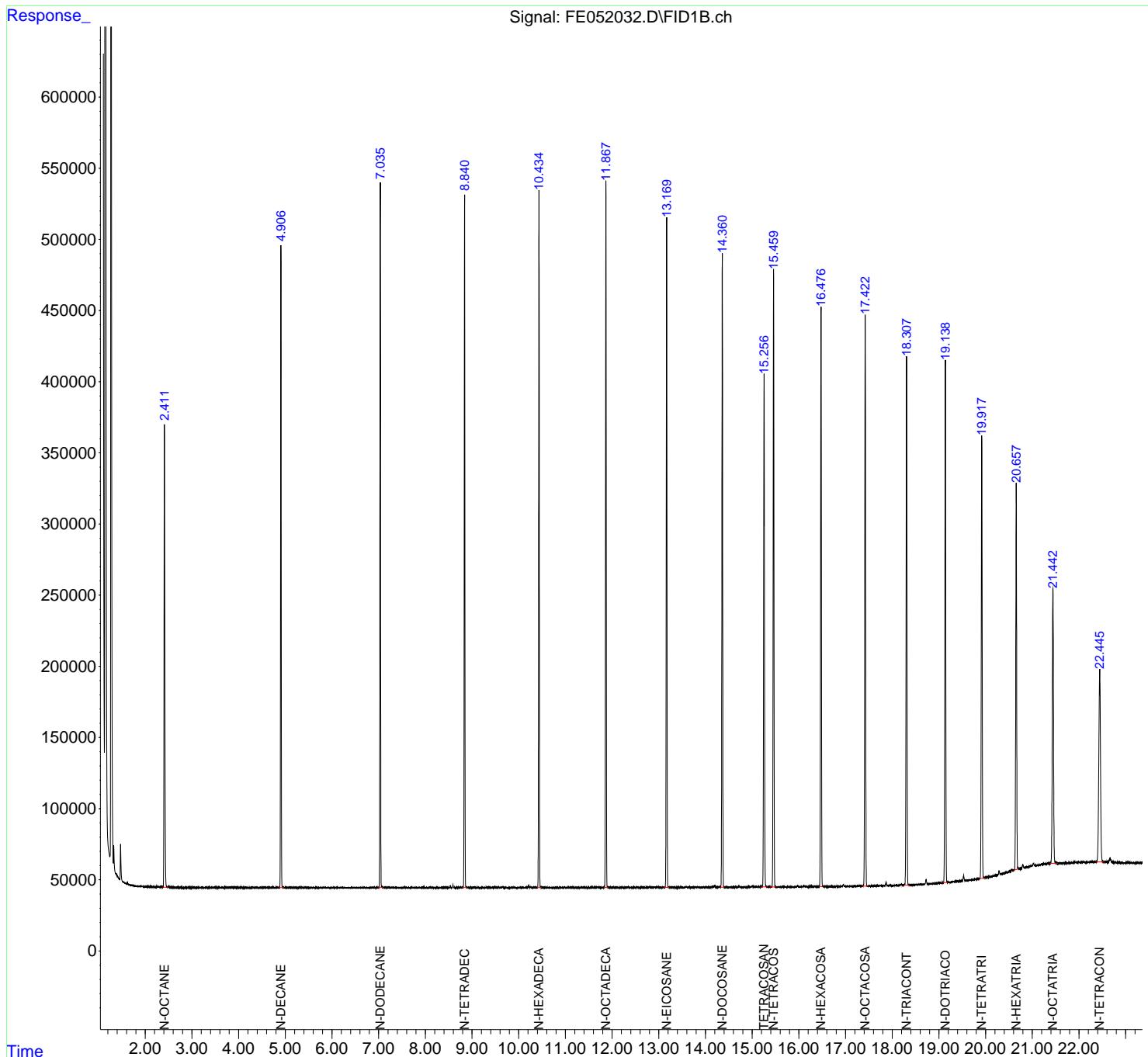
(m)=manual int.

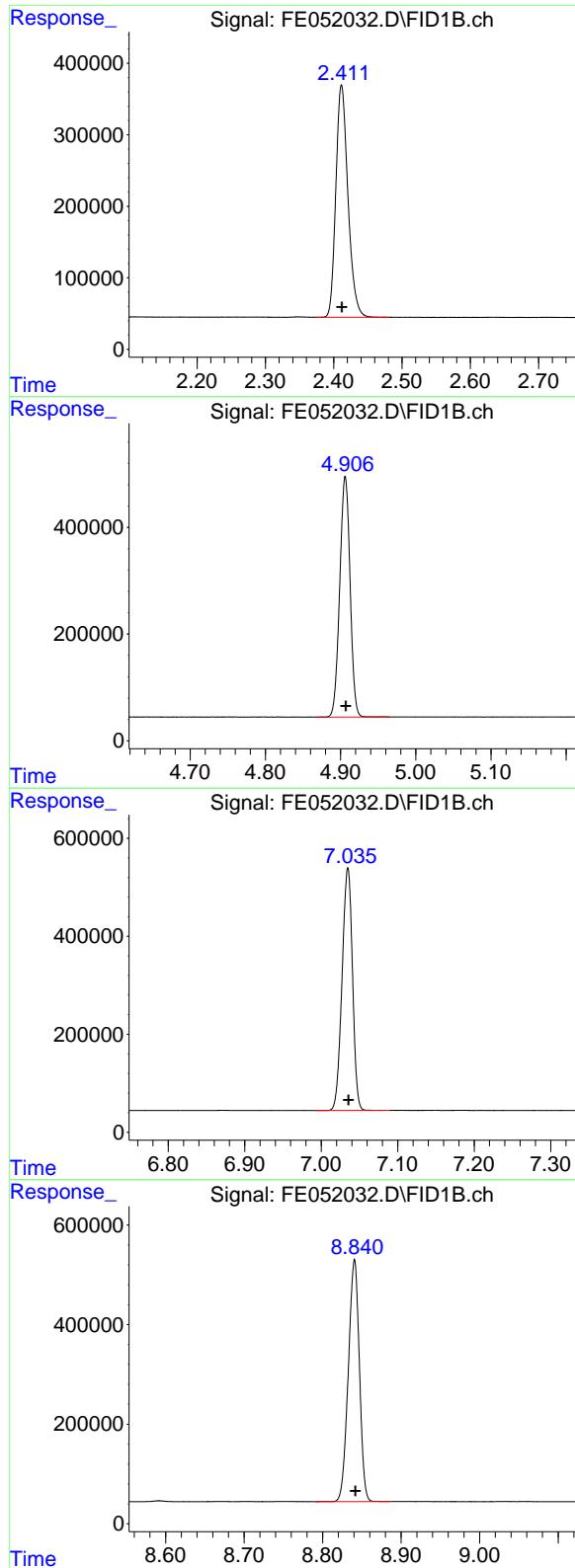
Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_E\Data\FE012325\  
 Data File : FE052032.D  
 Signal(s) : FID1B.ch  
 Acq On : 24 Jan 2025 01:06  
 Operator : YP\AJ  
 Sample : FE012325ICV  
 Misc :  
 ALS Vial : 23 Sample Multiplier: 1

**Instrument :**  
**FID\_E**  
**ClientSampleId :**  
**FE012325ICV**

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

Volume Inj. : 1uL  
 Signal Phase : Rx1-1ms  
 Signal Info : 20mx0.18mmx0.18um





### #1 N-OCTANE

R.T.: 2.412 min  
 Delta R.T.: 0.000 min **Instrument:**  
 Response: 3991003 FID\_E  
 Conc: 46.80 ug/ml **ClientSampleId:**  
 FE012325ICV

### #2 N-DECANE

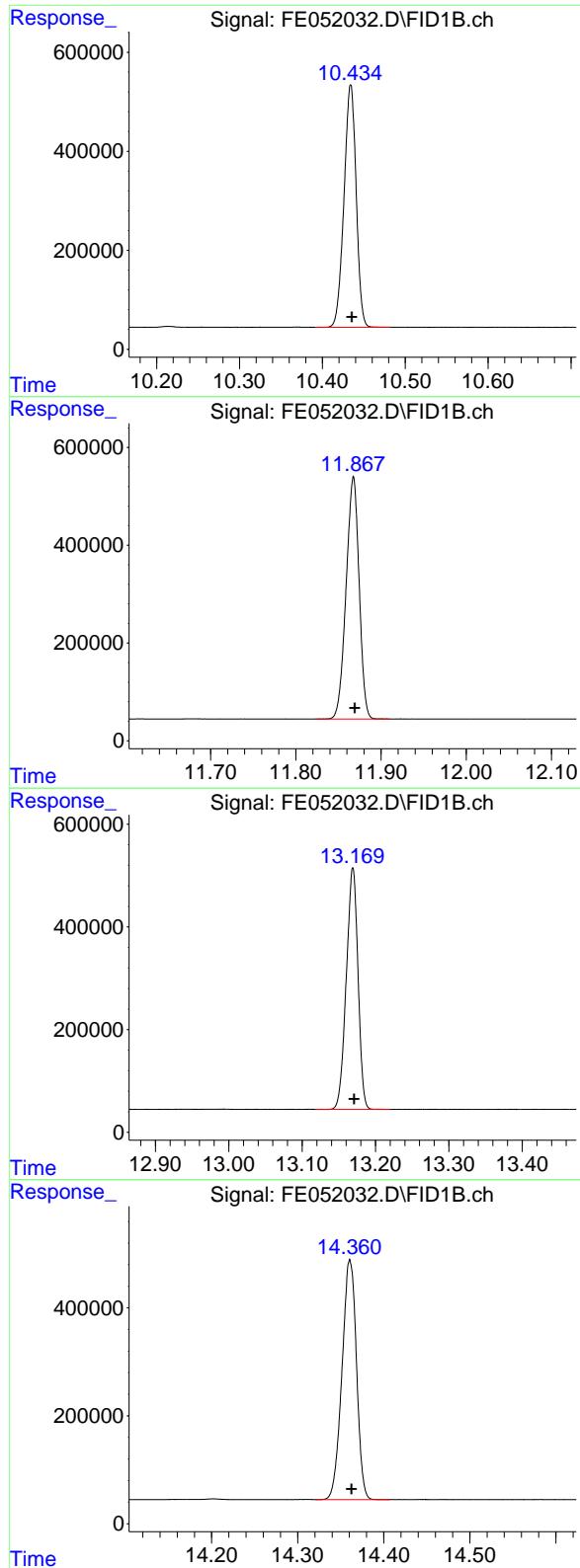
R.T.: 4.906 min  
 Delta R.T.: 0.000 min  
 Response: 4296957  
 Conc: 46.96 ug/ml

### #3 N-DODECANE

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

### #4 N-TETRADECANE

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



## #5 N-HEXADECANE

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

Instrument: FID\_E  
 ClientSampleId : FE012325ICV

## #6 N-OCTADECANE

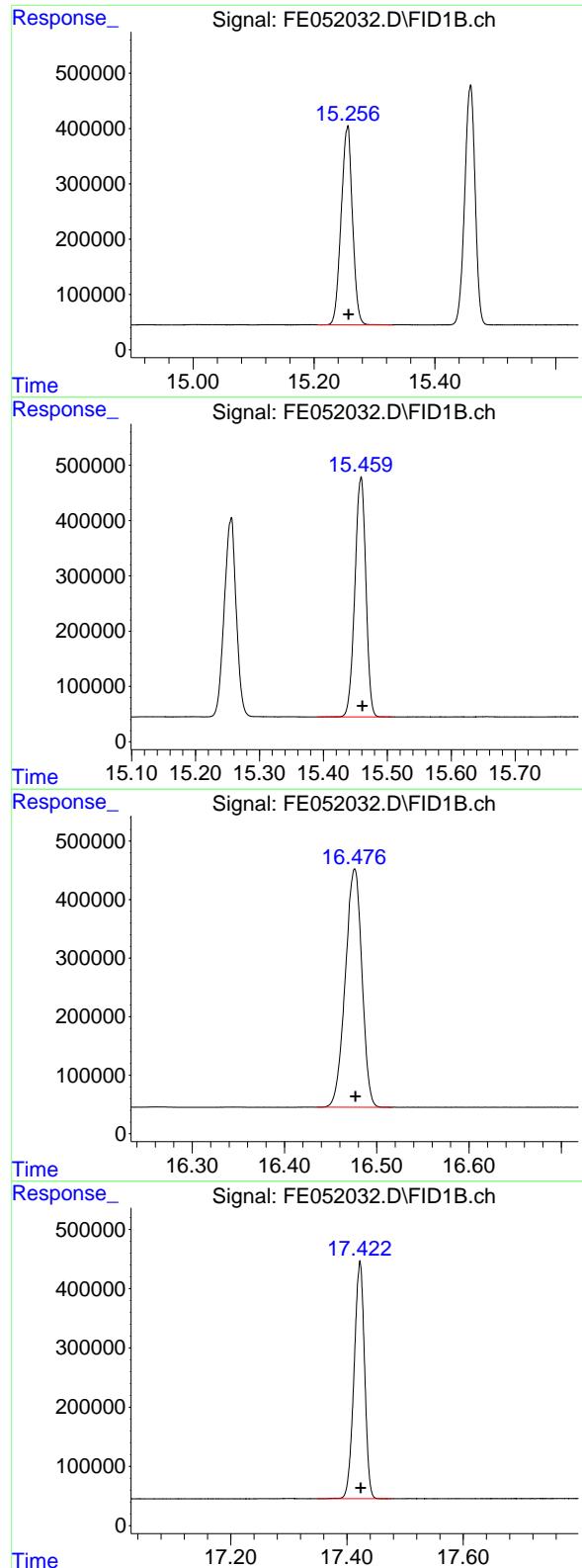
R.T.: 11.868 min  
 Delta R.T.: -0.001 min  
 Response: 5255597  
 Conc: 46.87 ug/ml

## #7 N-EICOSANE

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

## #8 N-DOCOSANE

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



## #9 TETRACOSANE-d50 (SURROGATE)

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

Instrument: FID\_E  
 ClientSampleId: FE012325ICV

## #10 N-TETRACOSANE

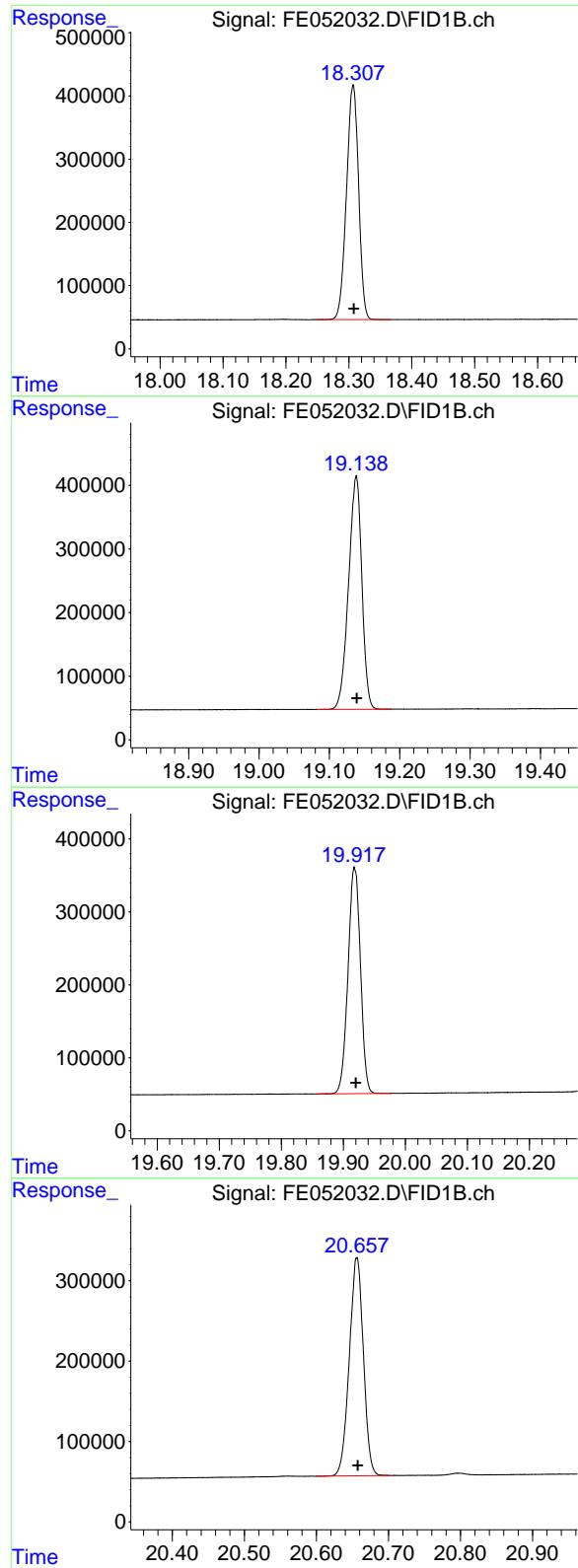
R.T.: 15.459 min  
 Delta R.T.: -0.002 min  
 Response: 5183378  
 Conc: 46.86 ug/ml

## #11 N-HEXACOSANE

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

## #12 N-OCTACOSANE

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



## #13 N-TRIACONTANE

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

Instrument: FID\_E  
 ClientSampleId: FE012325ICV

## #14 N-DOTRIACONTANE

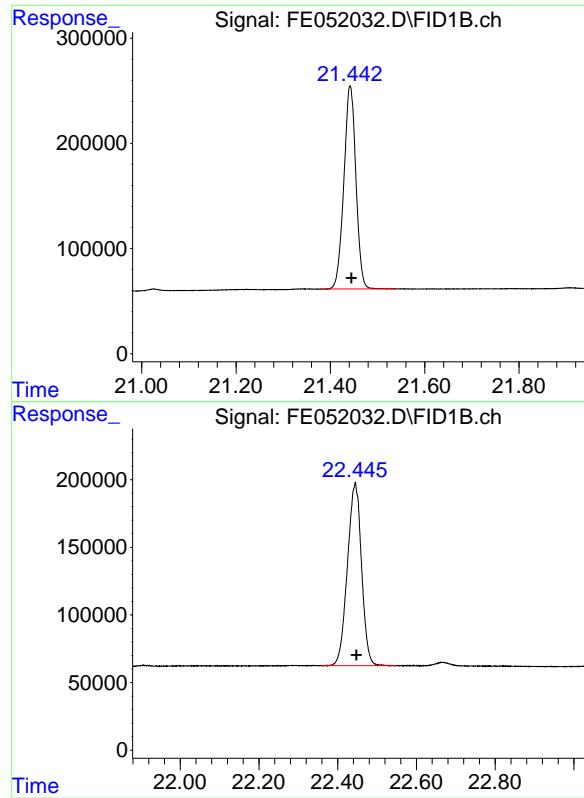
R.T.: 19.138 min  
 Delta R.T.: 0.000 min  
 Response: 4809025  
 Conc: 46.06 ug/ml

## #15 N-TETRATRIACONTANE

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

## #16 N-HEXATRIACONTANE

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



#17 N-OCTATRIACONTANE

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

Instrument: FID\_E  
ClientSampleId: FE012325ICV

#18 N-TETRACONTANE

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

## Report

rteres

Area Percent

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_E\Data\FE012325\  
Data File : FE052032.D  
Signal (s) : FID1B.ch  
Acq On : 24 Jan 2025 01:06  
Sample : FE012325.I.CV  
Mi SC  
ALS Vial : 23 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID\_E\methods\FE012325.M  
Title :

Signal : FID1B.ch

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

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



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

### DIESEL RANGE ORGANICS INITIAL CALIBRATION SUMMARY

Lab Name: Chemtech Contract: RUTW01  
ProjectID: NYCDDC SANTWOBR Brooklyn Bridge BBMCR  
Lab Code: CHEM Case No.: Q1232 SAS No.: Q1232 SDG No.: Q1232

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

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 : Rx1-1ms  
 Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

9) S TETRACOSANE-d50 (SURR...	15.054	7020283	50.000 ug/ml
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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-HEXADECANE	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 &gt; 1/2 Window

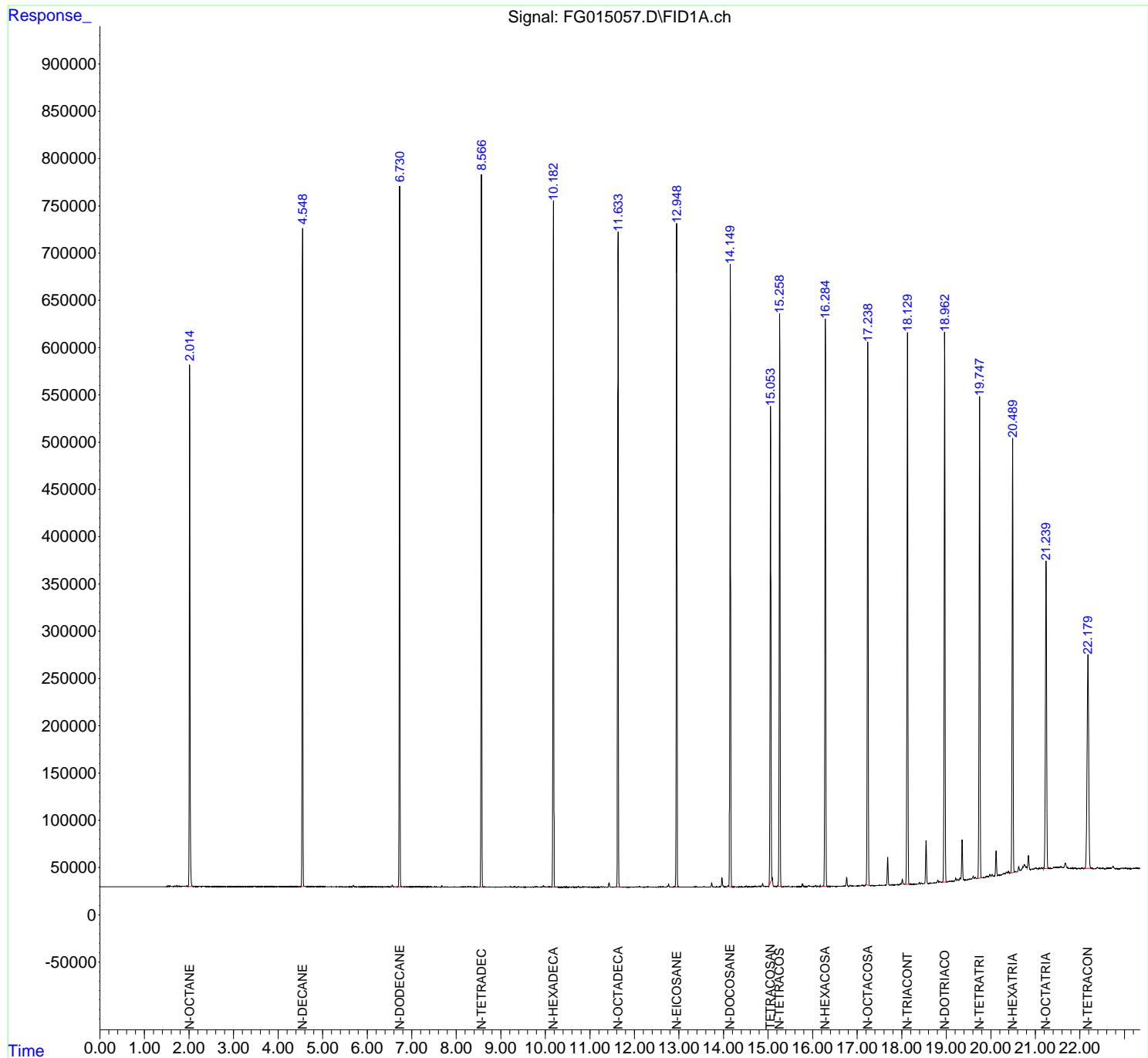
(m)=manual int.

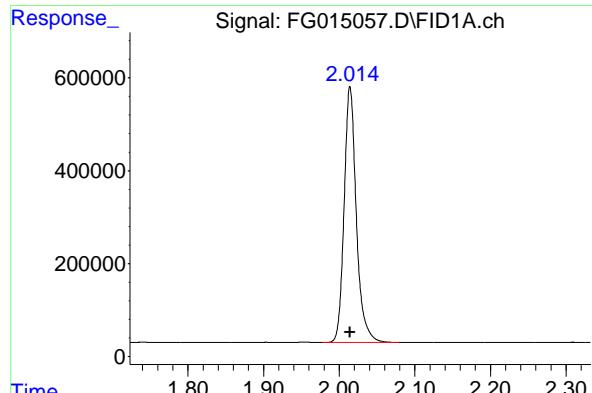
Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG011325\  
 Data File : FG015057.D  
 Signal(s) : FID1A.ch  
 Acq On : 13 Jan 2025 09:45  
 Operator : YP\AJ  
 Sample : 50 TRPH STD  
 Misc :  
 ALS Vial : 12 Sample Multiplier: 1

**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

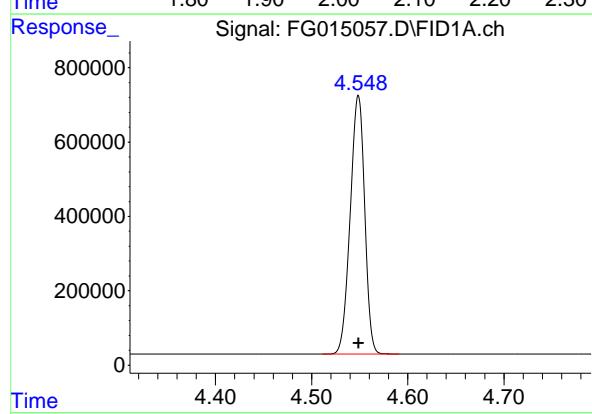
Volume Inj. : 1uL  
 Signal Phase : Rx1-1ms  
 Signal Info : 20mx0.18mmx0.18um





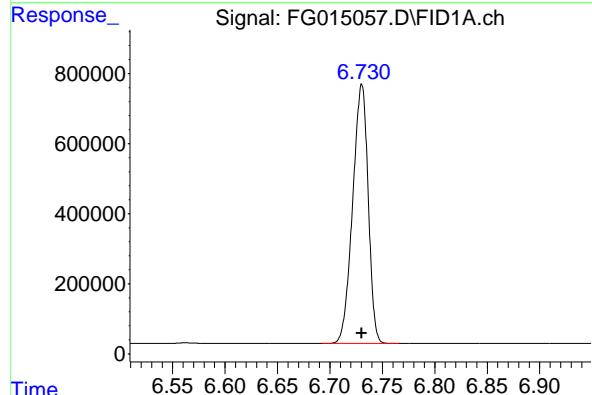
## #1 N-OCTANE

R.T.: 2.014 min  
Delta R.T.: 0.000 min  
Instrument: FID\_G  
Response: 6179916  
Conc: 50.00 ug/ml  
ClientSampleId :  
50 TRPH STD



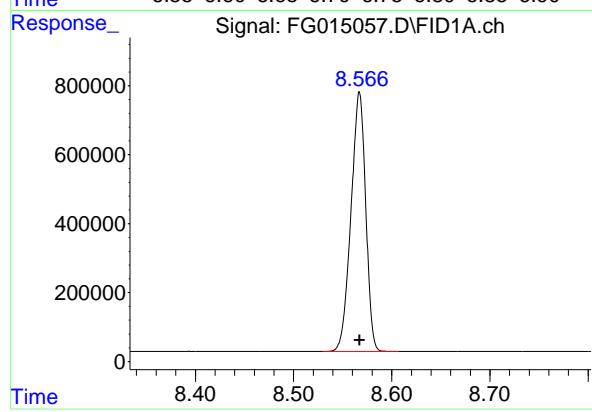
## #2 N-DECANE

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



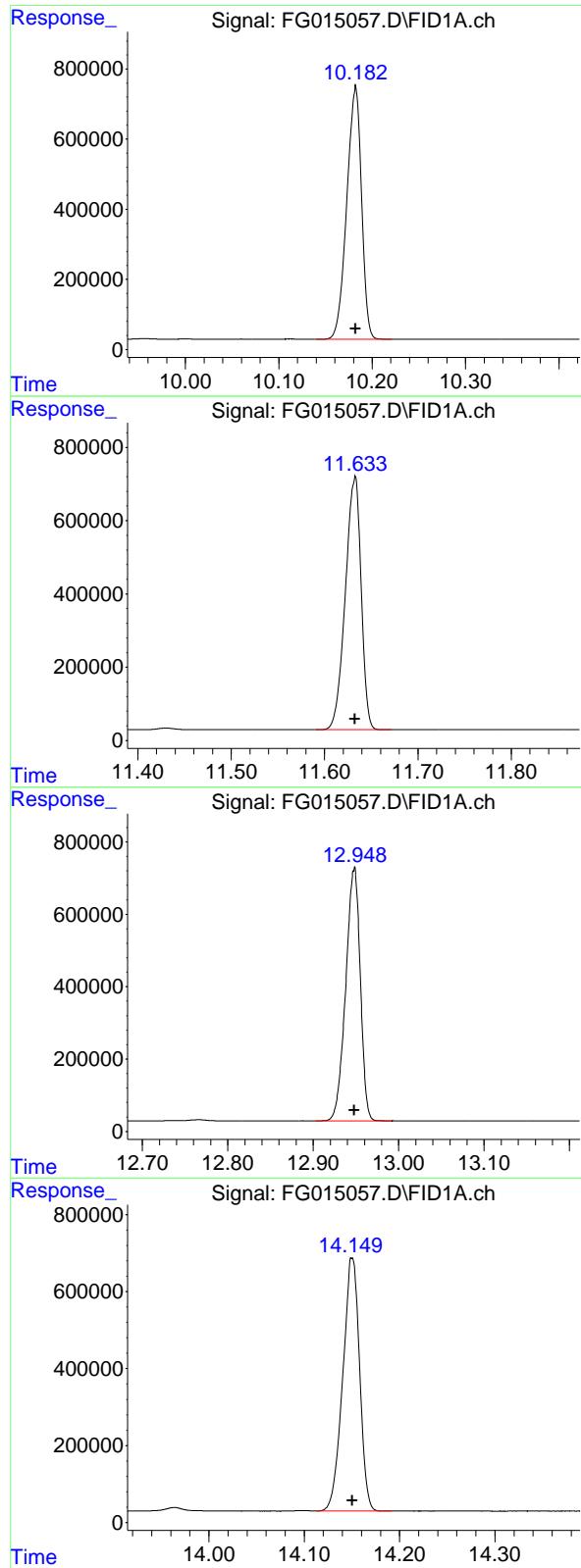
## #3 N-DODECANE

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

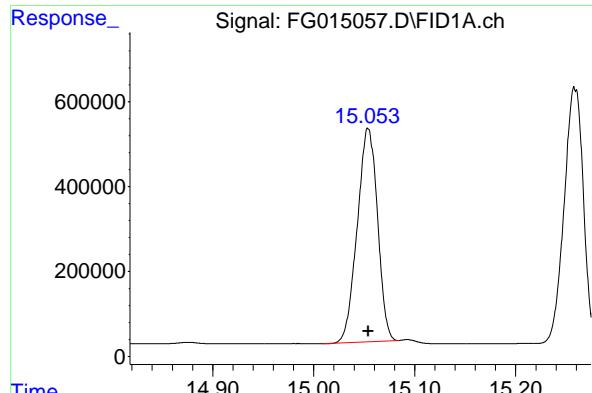
R.T.: 11.633 min  
 Delta R.T.: 0.000 min  
 Response: 8177811  
 Conc: 50.00 ug/ml

## #7 N-EICOSANE

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

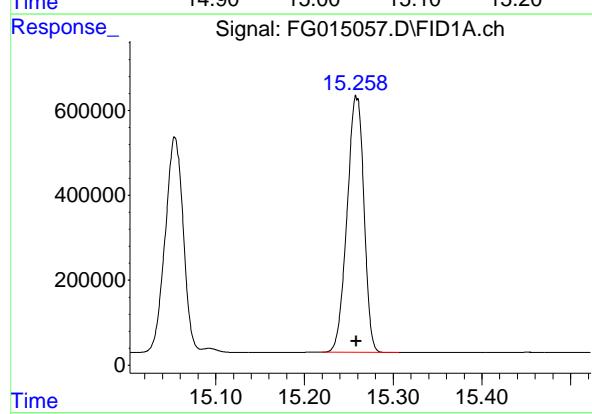
## #8 N-DOCOSANE

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



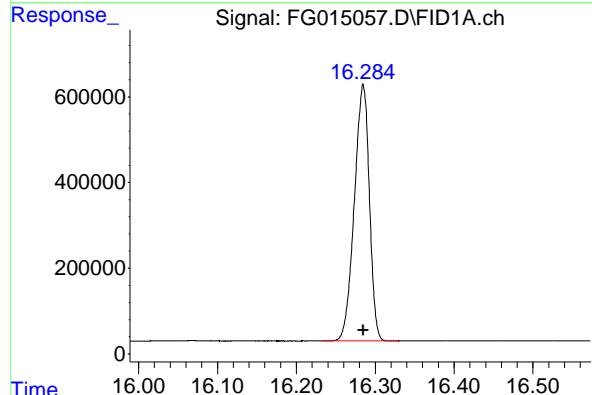
## #9 TETRACOSANE-d50 (SURROGATE)

R.T.: 15.054 min  
Delta R.T.: 0.000 min  
Instrument: FID\_G  
Response: 7020283  
Conc: 50.00 ug/ml  
ClientSampleId : 50 TRPH STD



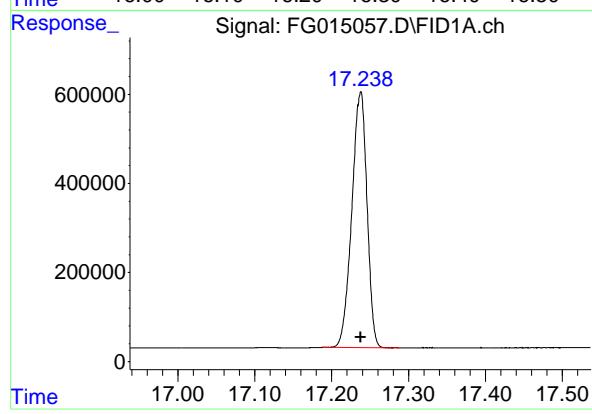
## #10 N-TETRACOSANE

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



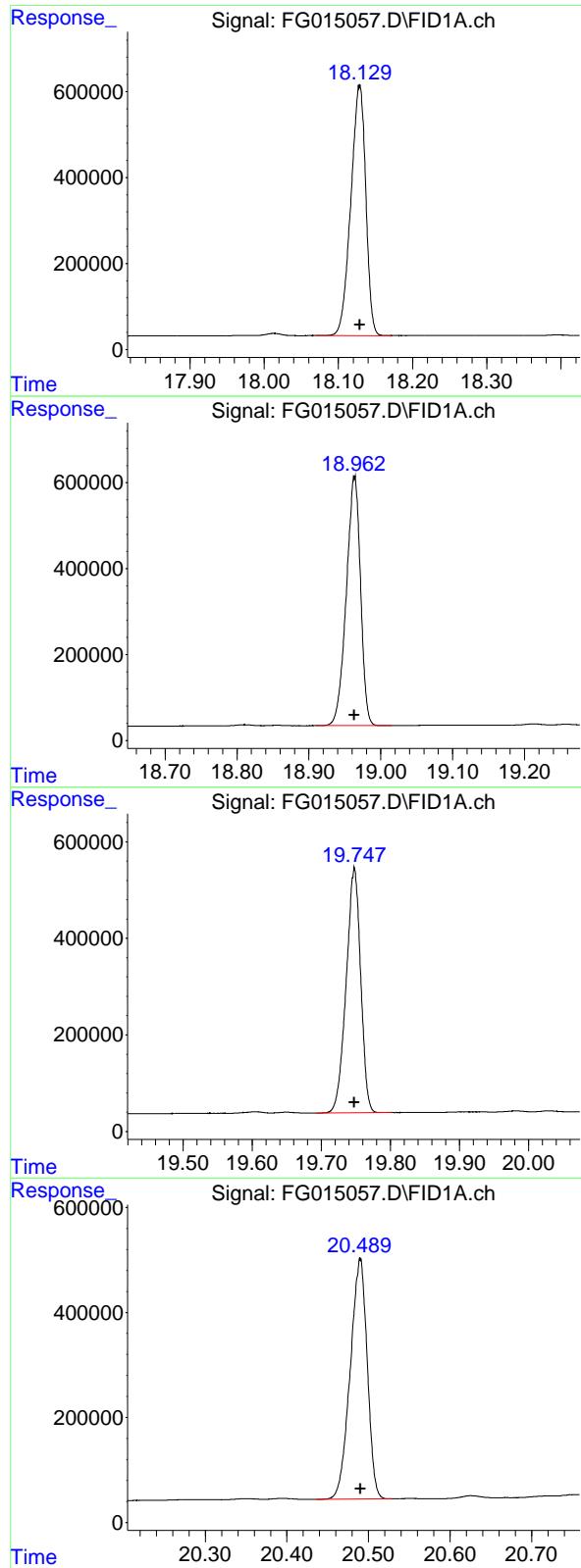
## #11 N-HEXACOSANE

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 FID\_G  
 Conc: 50.00 ug/ml ClientSampleId :  
 50 TRPH STD

## #14 N-DOTRIACONTANE

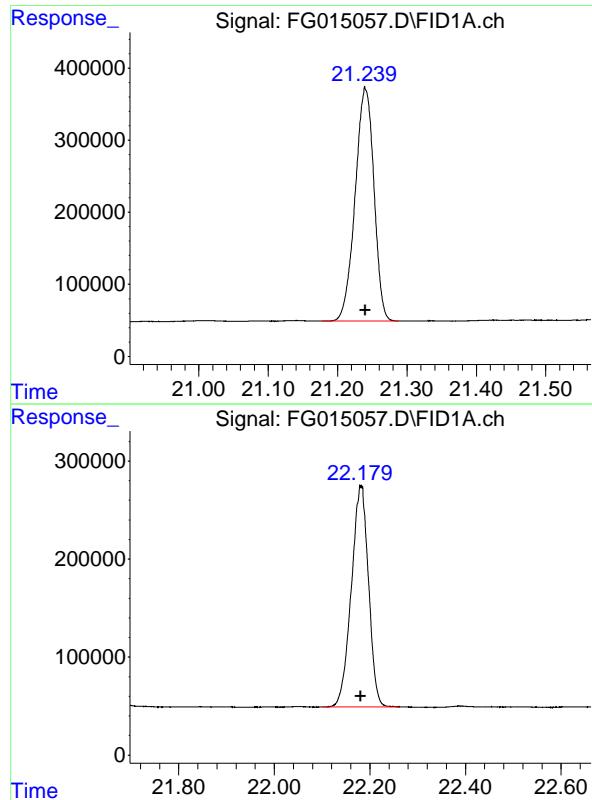
R.T.: 18.963 min  
 Delta R.T.: 0.000 min  
 Response: 7971620  
 Conc: 50.00 ug/ml

## #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 min  
Instrument: FID\_G  
Response: 6083503  
Conc: 50.00 ug/ml  
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

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 : Rx1-1ms  
 Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units
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**System Monitoring Compounds**

9) S TETRACOSANE-d50 (SURR...	15.050	2426477	18.992 ug/ml
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**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-HEXADECANE	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 &gt; 1/2 Window

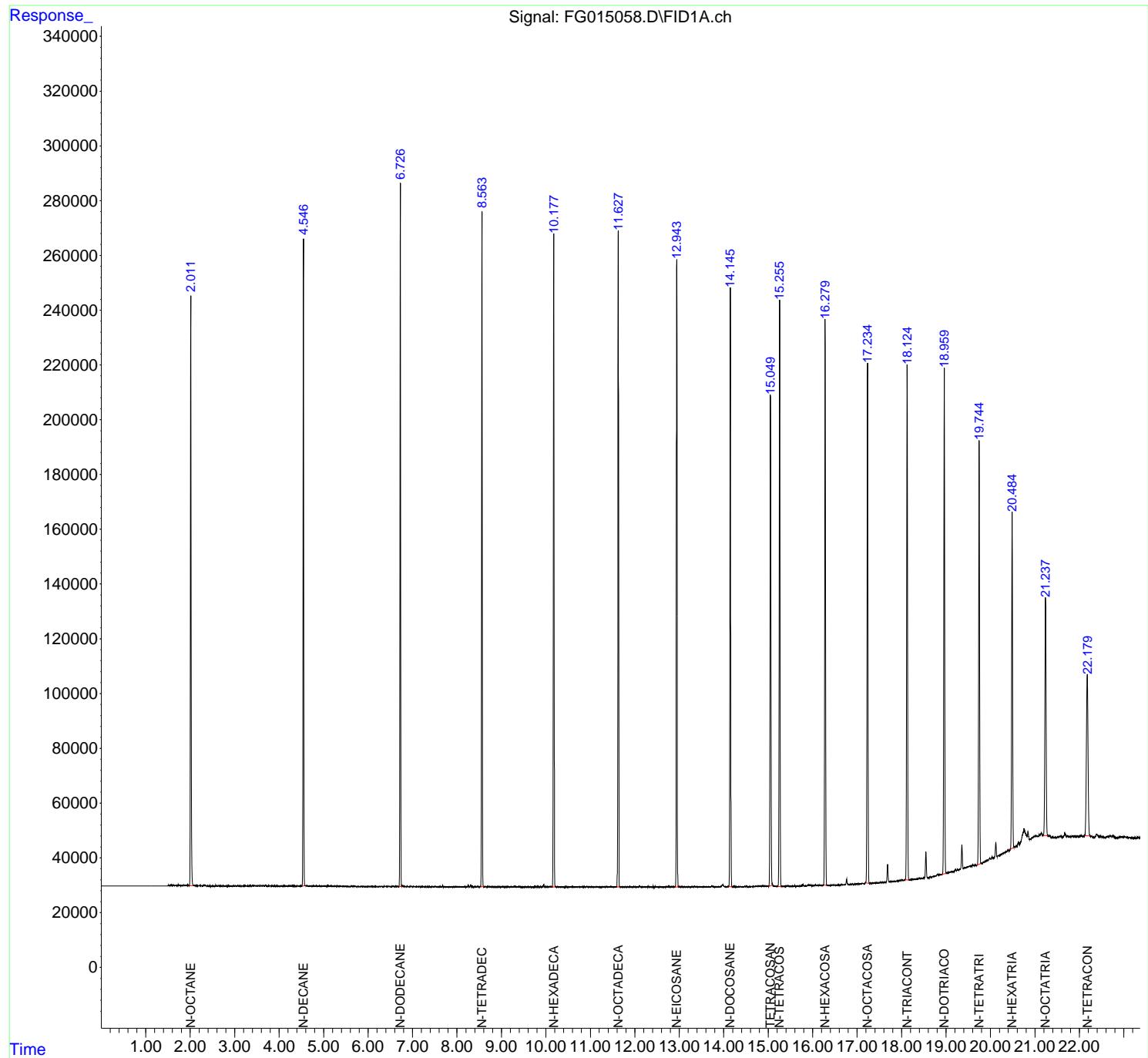
(m)=manual int.

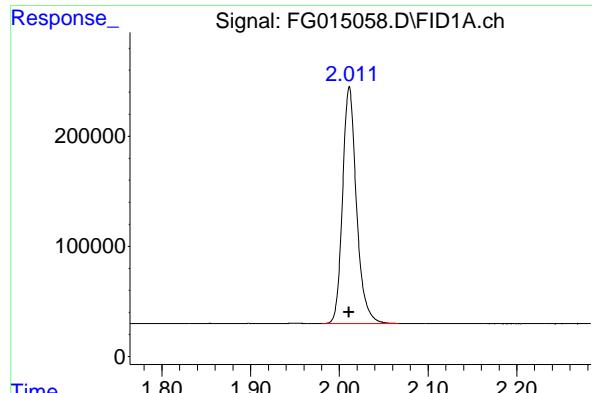
Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG011325\  
 Data File : FG015058.D  
 Signal(s) : FID1A.ch  
 Acq On : 13 Jan 2025 10:14  
 Operator : YP\AJ  
 Sample : 20 TRPH STD  
 Misc :  
 ALS Vial : 13 Sample Multiplier: 1

**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

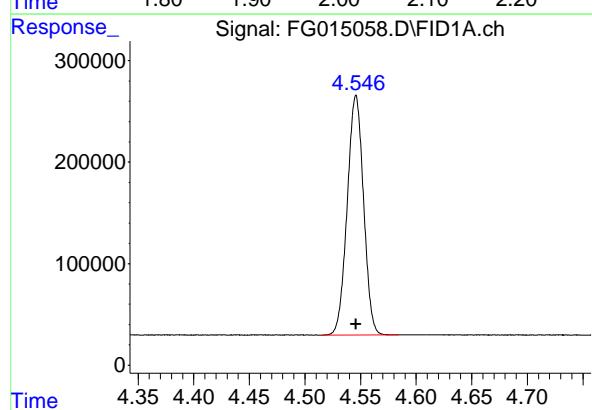
Volume Inj. : 1uL  
 Signal Phase : Rx1-1ms  
 Signal Info : 20mx0.18mmx0.18um





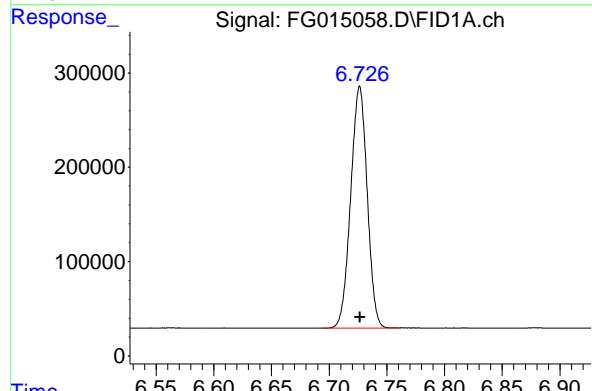
## #1 N-OCTANE

R.T.: 2.011 min  
Delta R.T.: 0.000 min  
Instrument: FID\_G  
Response: 2347743  
Conc: 19.56 ug/ml  
ClientSampleId : 20 TRPH STD



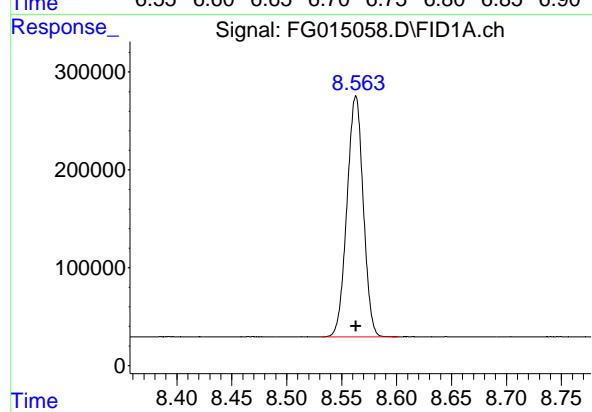
## #2 N-DECANE

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



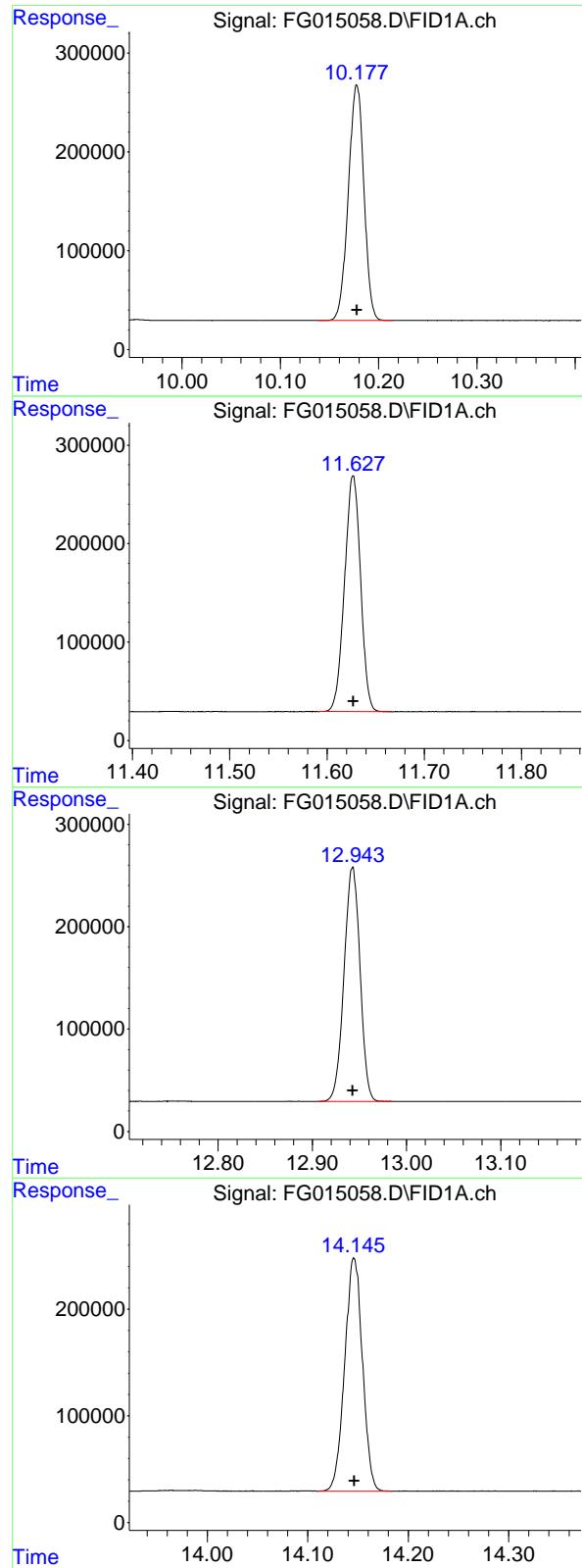
## #3 N-DODECANE

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 FID\_G  
 Conc: 18.68 ug/ml ClientSampleId :  
 20 TRPH STD

## #6 N-OCTADECANE

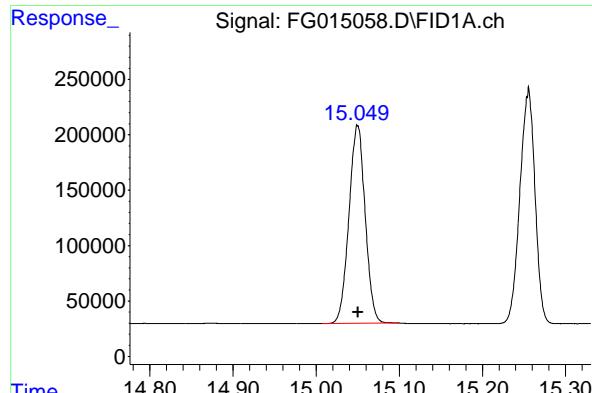
R.T.: 11.627 min  
 Delta R.T.: 0.000 min  
 Response: 2743181  
 Conc: 18.80 ug/ml

## #7 N-EICOSANE

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

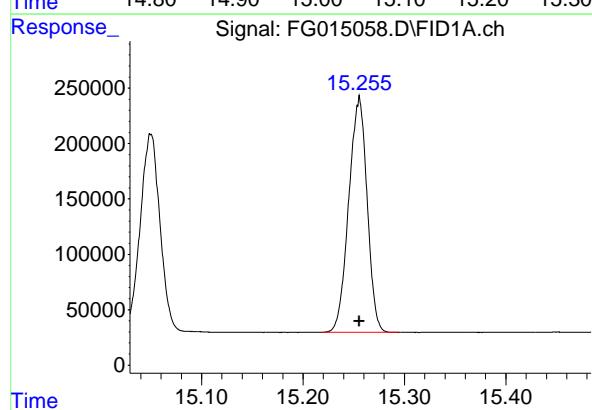
## #8 N-DOCOSANE

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



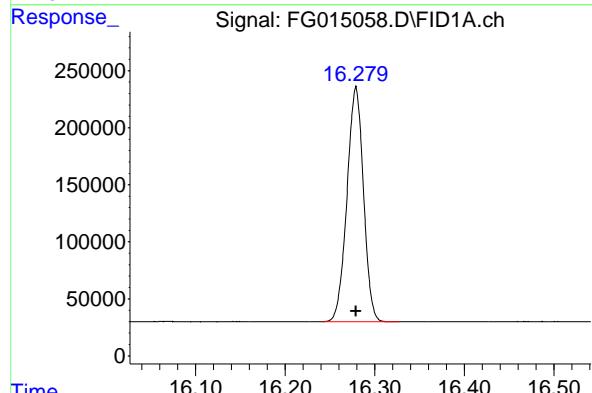
## #9 TETRACOSANE-d50 (SURROGATE)

R.T.: 15.050 min  
Delta R.T.: 0.000 min  
Instrument: FID\_G  
Response: 2426477  
Conc: 18.99 ug/ml  
ClientSampleId : 20 TRPH STD



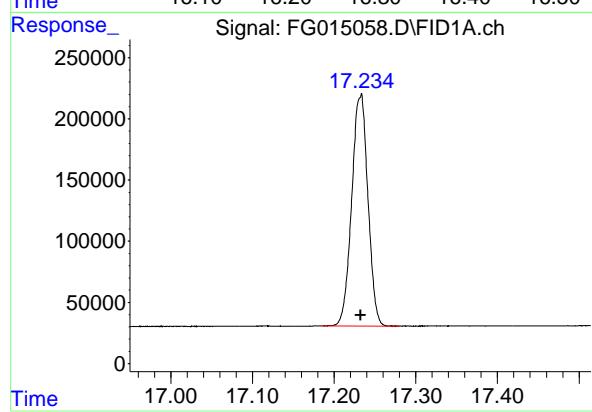
## #10 N-TETRACOSANE

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



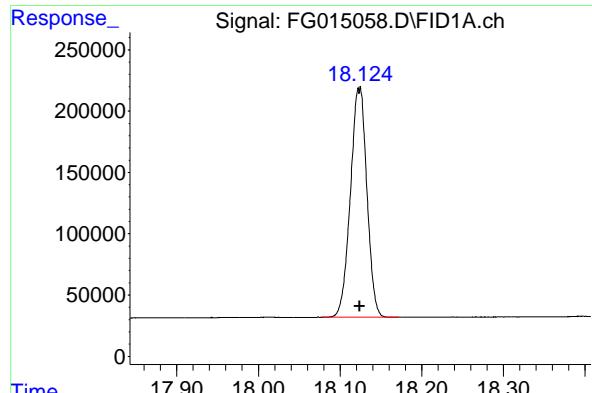
## #11 N-HEXACOSANE

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



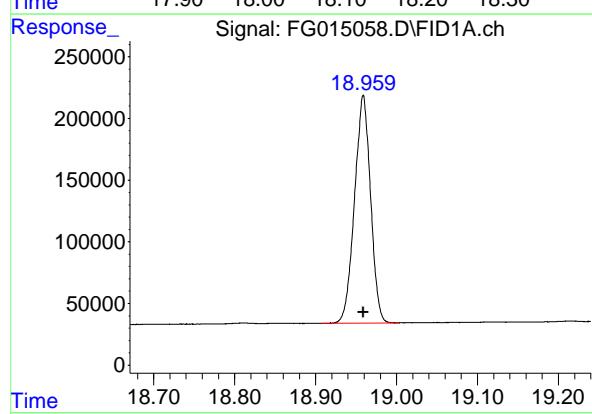
## #12 N-OCTACOSANE

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



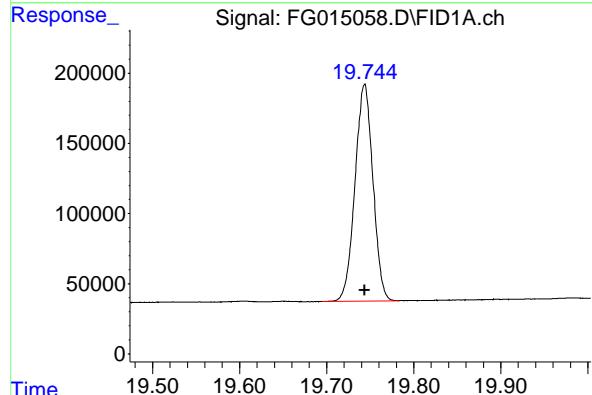
#13 N-TRIACONTANE

R.T.: 18.124 min  
Delta R.T.: 0.000 min  
Instrument: FID\_G  
Response: 2626561  
Conc: 18.79 ug/ml  
ClientSampleId : 20 TRPH STD



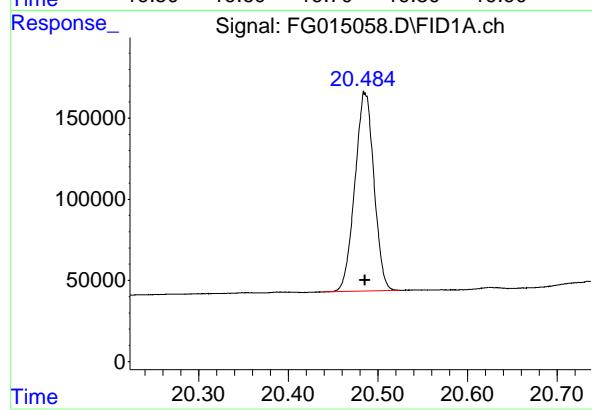
#14 N-DOTRIACONTANE

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



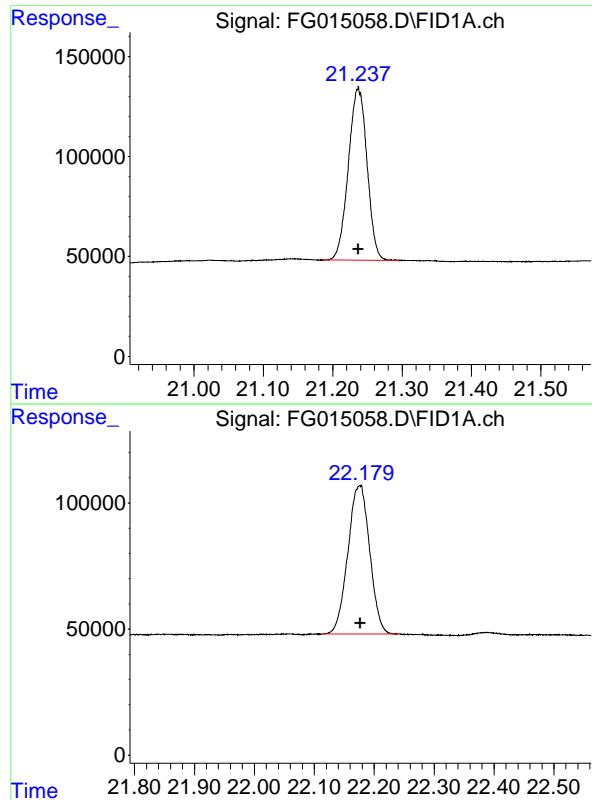
#15 N-TETRATRIACONTANE

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  
Instrument: FID\_G  
Response: 1610414  
Conc: 16.80 ug/ml  
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

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 : Rx1-1ms  
 Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units
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**System Monitoring Compounds**

9) S TETRACOSANE-d50 (SURR...	15.049	1319274	10.242 ug/ml
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**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-HEXADECANE	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 &gt; 1/2 Window

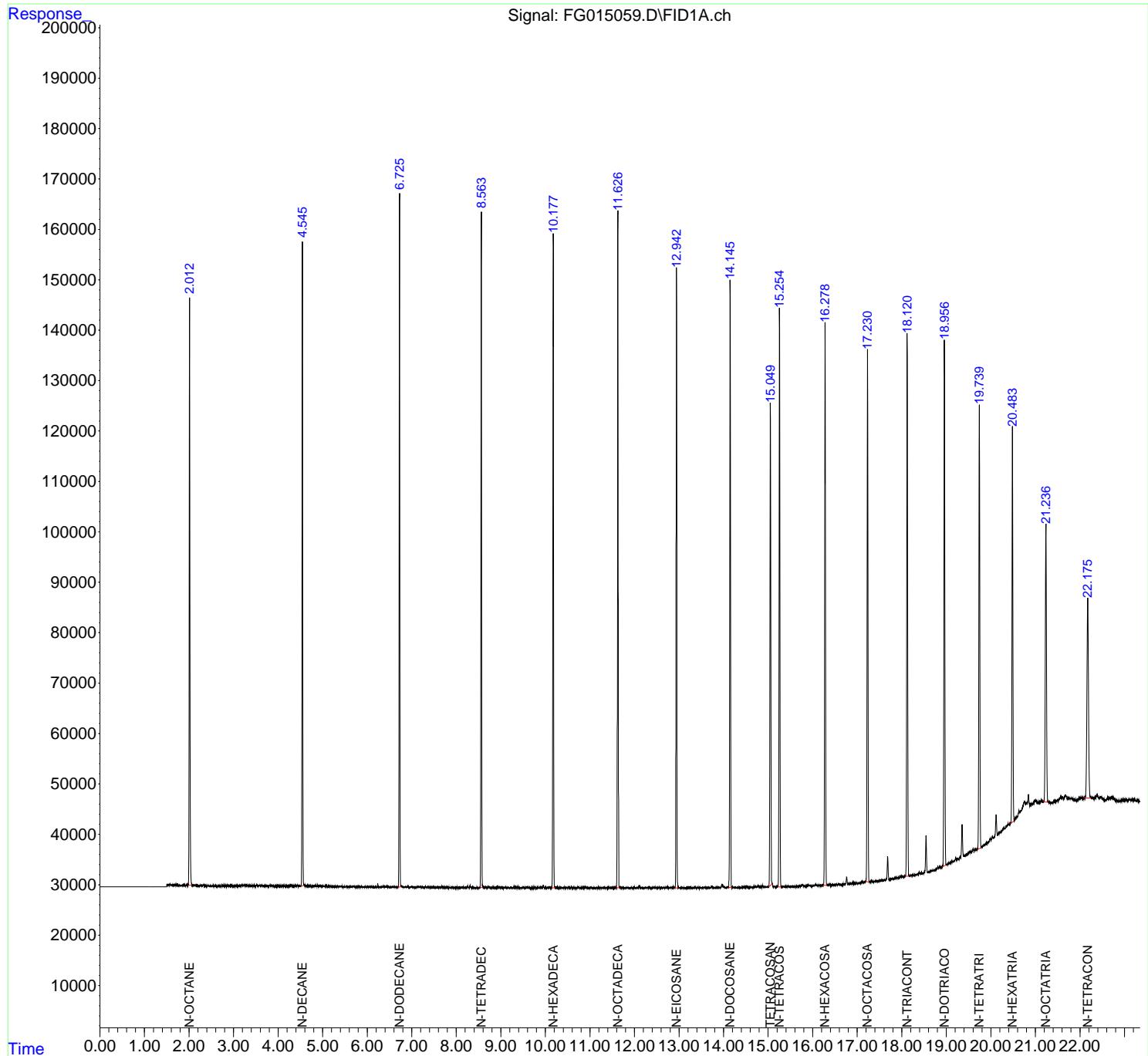
(m)=manual int.

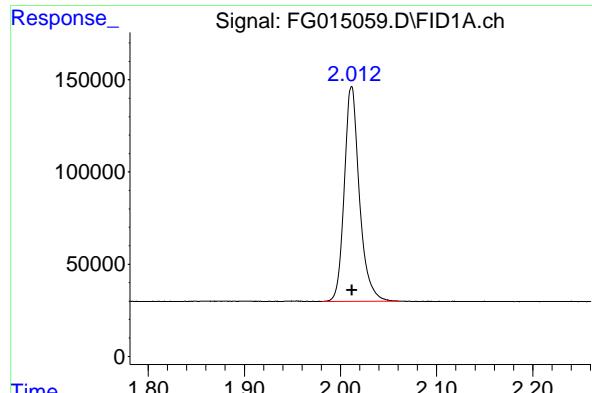
Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG011325\  
 Data File : FG015059.D  
 Signal(s) : FID1A.ch  
 Acq On : 13 Jan 2025 10:42  
 Operator : YP\AJ  
 Sample : 10 TRPH STD  
 Misc :  
 ALS Vial : 14 Sample Multiplier: 1

**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

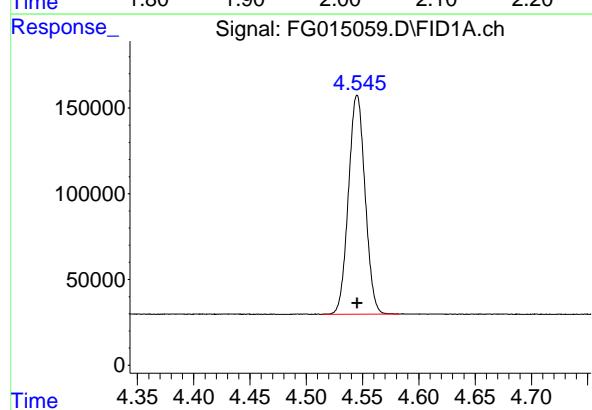
Volume Inj. : 1uL  
 Signal Phase : Rx1-1ms  
 Signal Info : 20mx0.18mmx0.18um





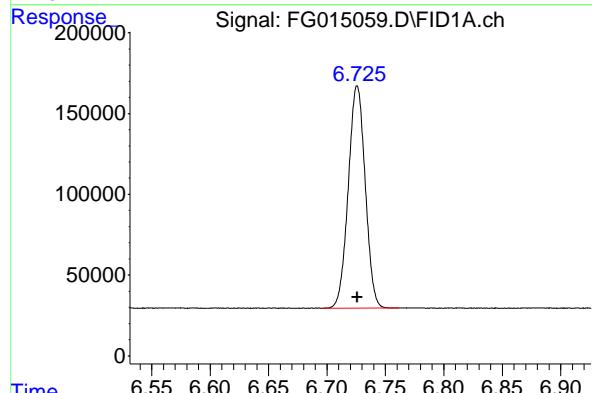
#1 N-OCTANE

R.T.: 2.012 min  
Delta R.T.: 0.000 min  
Instrument: FID\_G  
Response: 1276191  
Conc: 10.47 ug/ml  
ClientSampleId : 10 TRPH STD



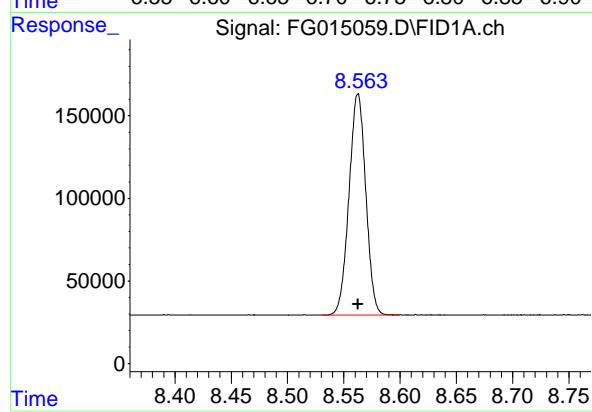
#2 N-DECANE

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



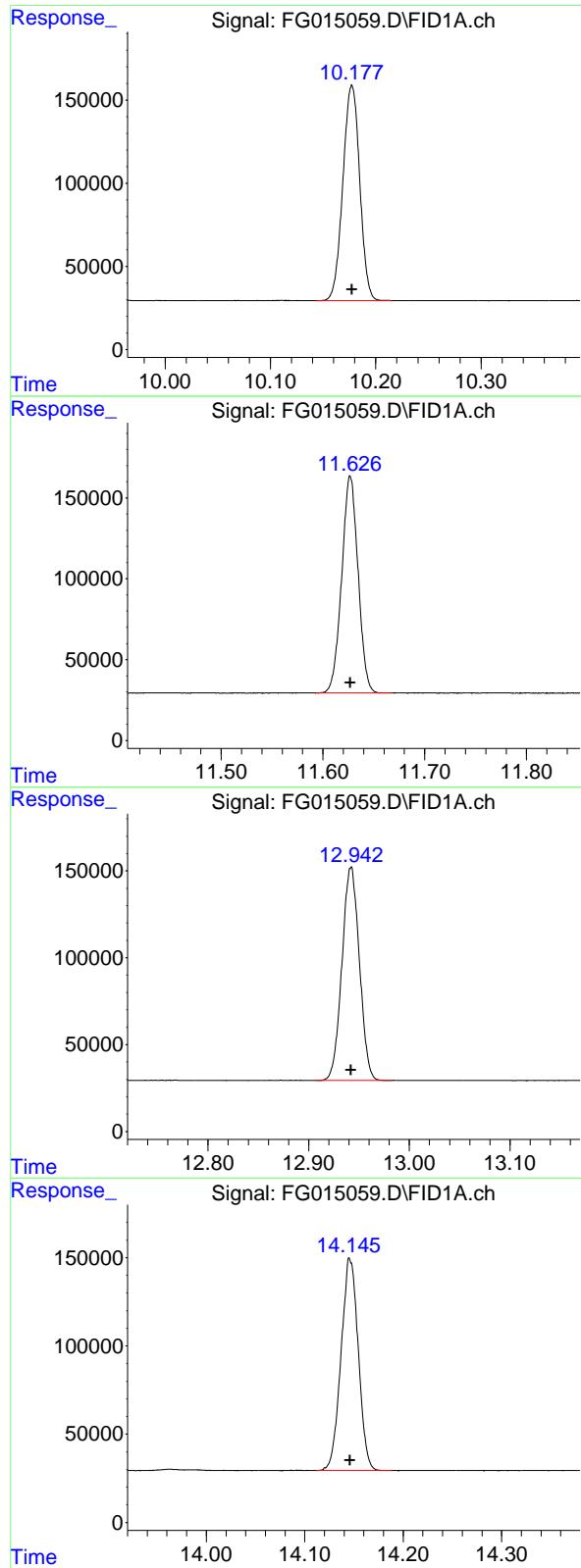
#3 N-DODECANE

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 FID\_G  
 Conc: 10.16 ug/ml ClientSampleId :  
 10 TRPH STD

## #6 N-OCTADECANE

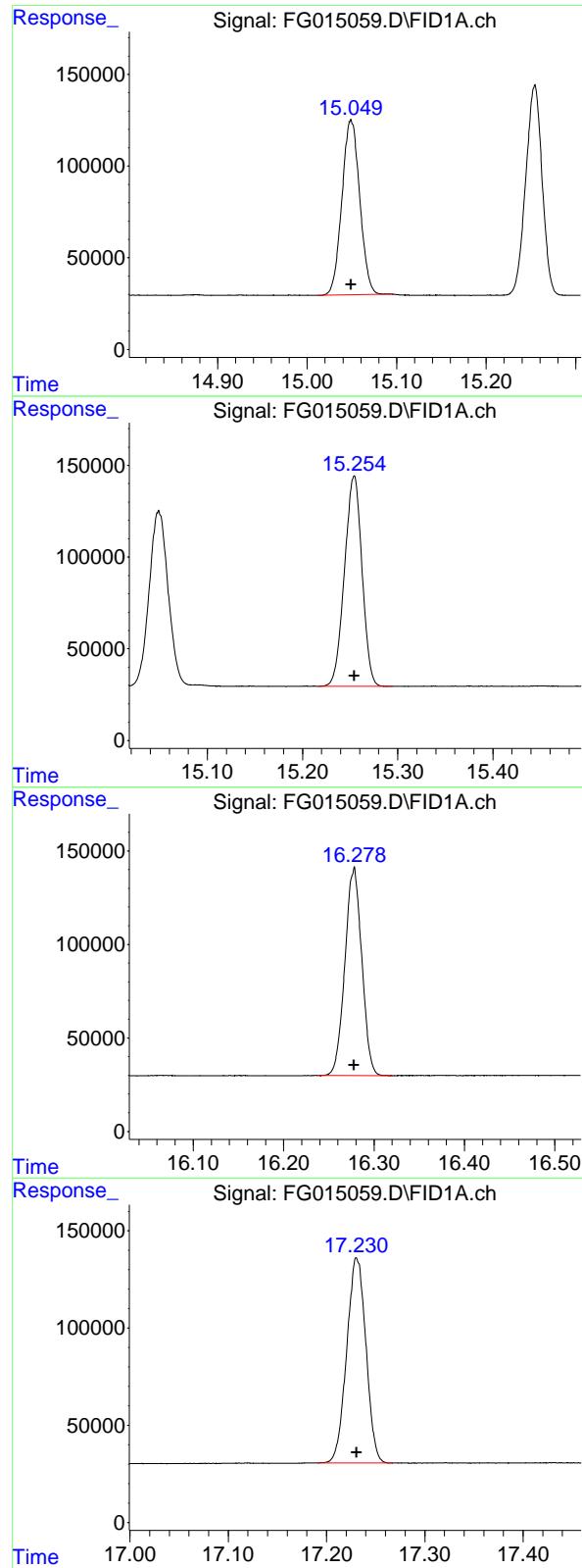
R.T.: 11.627 min  
 Delta R.T.: 0.000 min  
 Response: 1501248  
 Conc: 10.21 ug/ml

## #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

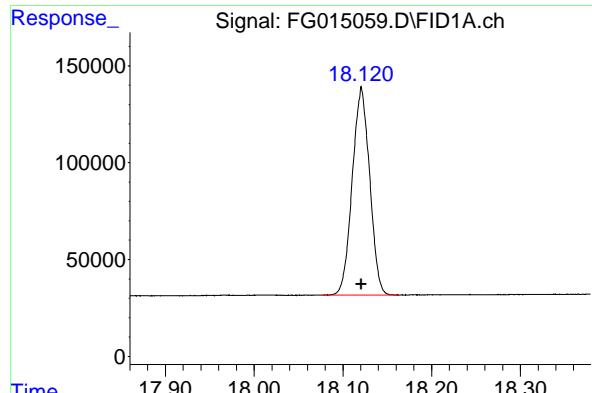
R.T.: 15.254 min  
 Delta R.T.: 0.000 min  
 Response: 1461022  
 Conc: 10.21 ug/ml

### #11 N-HEXACOSANE

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

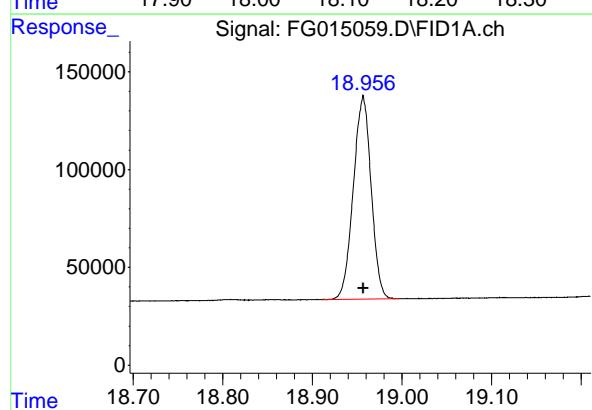
### #12 N-OCTACOSANE

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



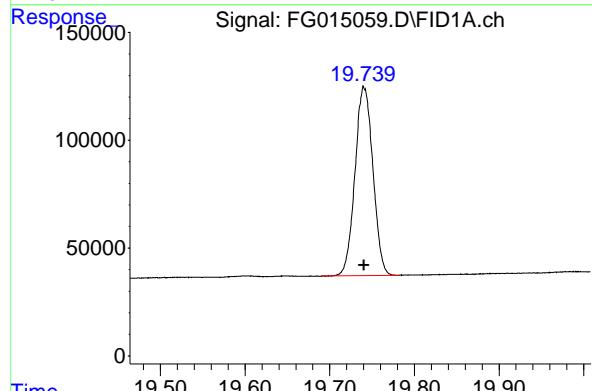
#13 N-TRIACONTANE

R.T.: 18.121 min  
Delta R.T.: 0.000 min  
Instrument: FID\_G  
Response: 1459210  
Conc: 10.33 ug/ml  
ClientSampleId :  
10 TRPH STD



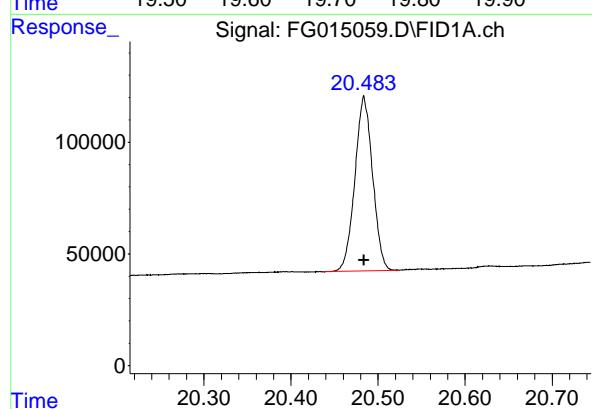
#14 N-DOTRIACONTANE

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



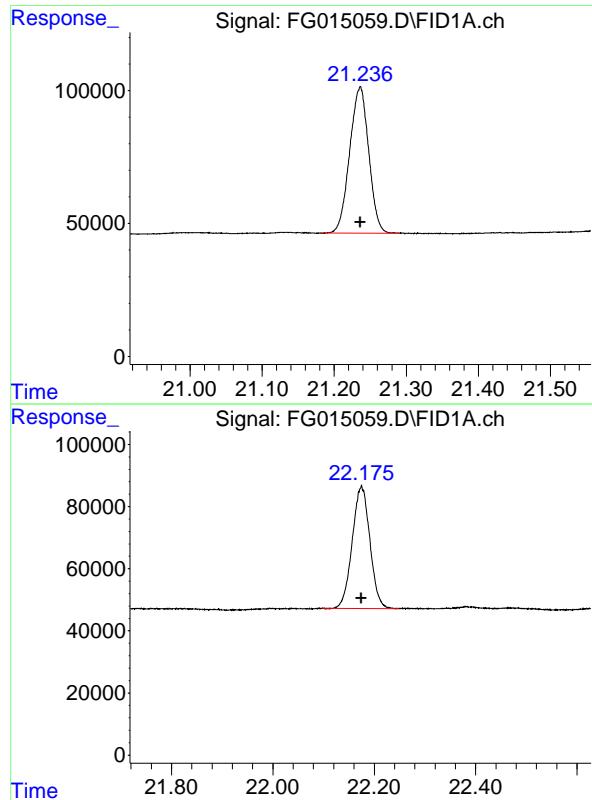
#15 N-TETRATRIACONTANE

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  
Instrument:  
Response: 1010014 FID\_G  
Conc: 10.40 ug/ml 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

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 : Rx1-1ms  
 Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units
<hr/>			
<b>System Monitoring Compounds</b>			
9) S TETRACOSANE-d50 (SURR...	15.048	648631	5.029 ug/ml
<hr/>			
<b>Target Compounds</b>			
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-HEXADECOSANE	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
<hr/>			

(f)=RT Delta &gt; 1/2 Window

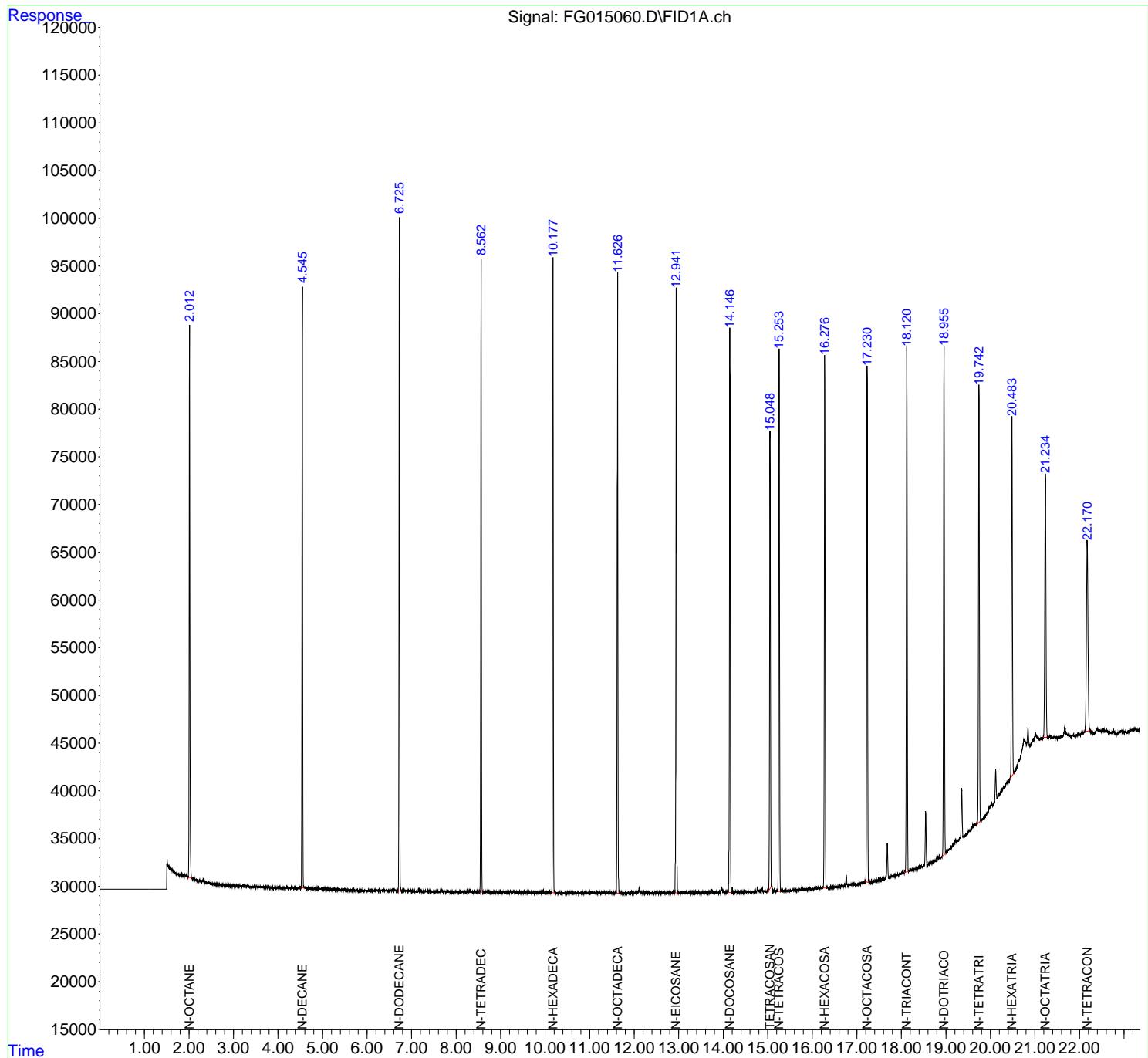
(m)=manual int.

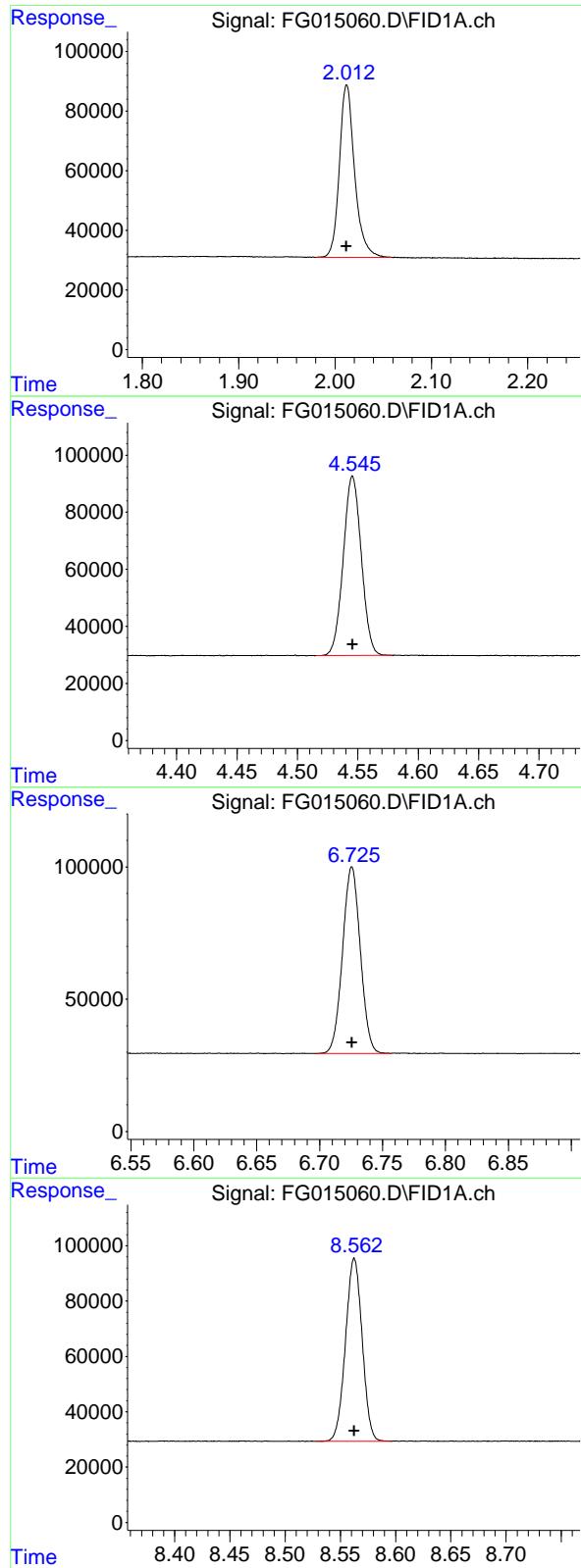
Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG011325\  
 Data File : FG015060.D  
 Signal(s) : FID1A.ch  
 Acq On : 13 Jan 2025 11:11  
 Operator : YP\AJ  
 Sample : 5 TRPH STD  
 Misc :  
 ALS Vial : 15 Sample Multiplier: 1

**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 : Rx1-1ms  
 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

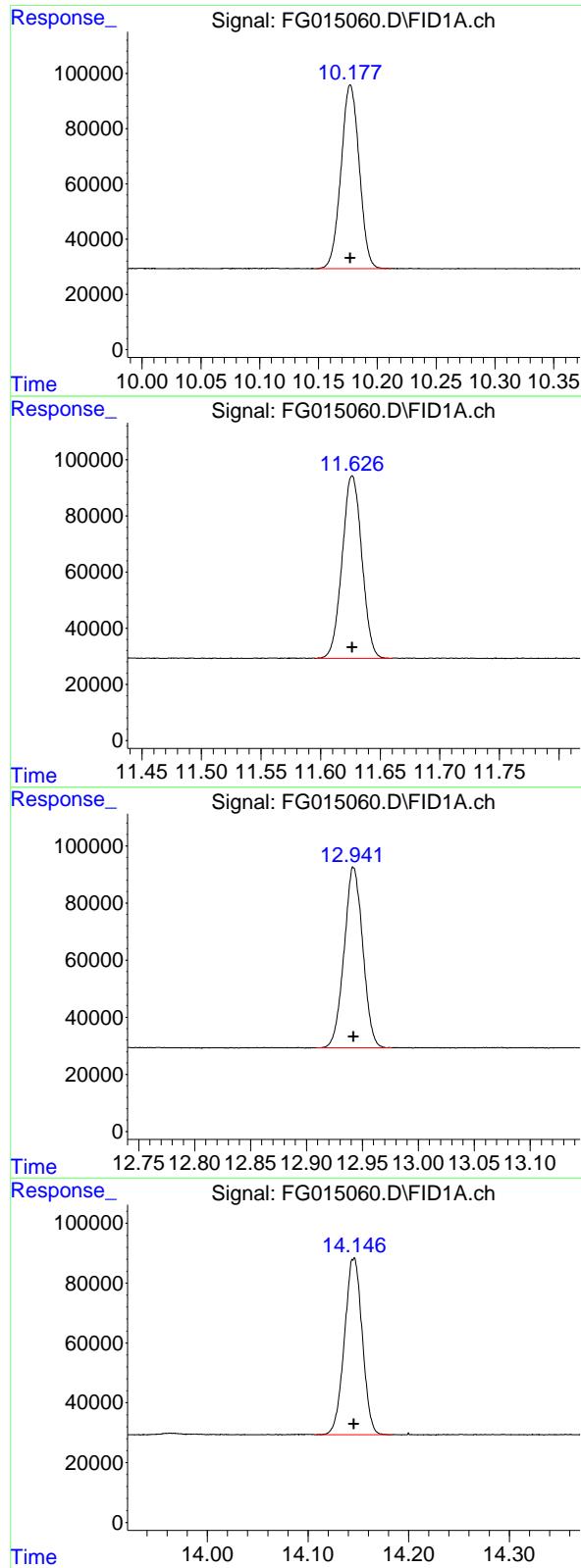
R.T.: 4.546 min  
 Delta R.T.: 0.000 min  
 Response: 654008  
 Conc: 5.03 ug/ml

### #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 FID\_G  
 Conc: 5.05 ug/ml ClientSampleId :  
 5 TRPH STD

## #6 N-OCTADECANE

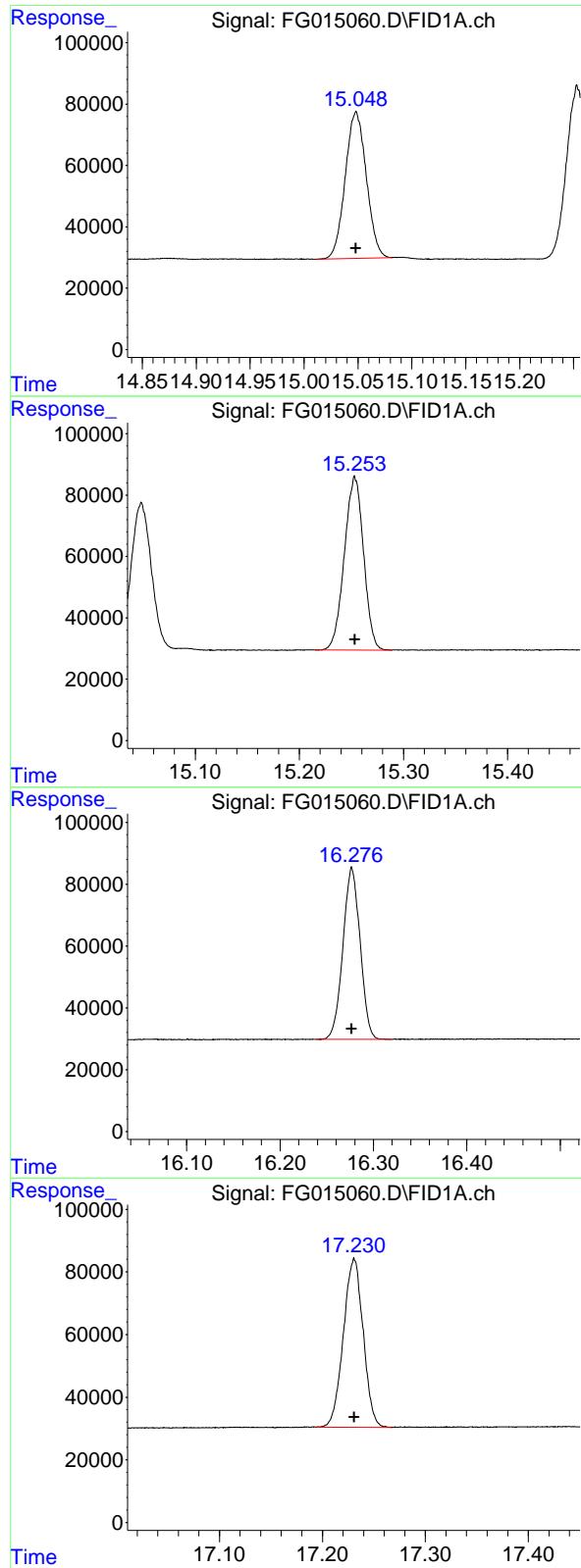
R.T.: 11.627 min  
 Delta R.T.: 0.000 min  
 Response: 747864  
 Conc: 5.07 ug/ml

## #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

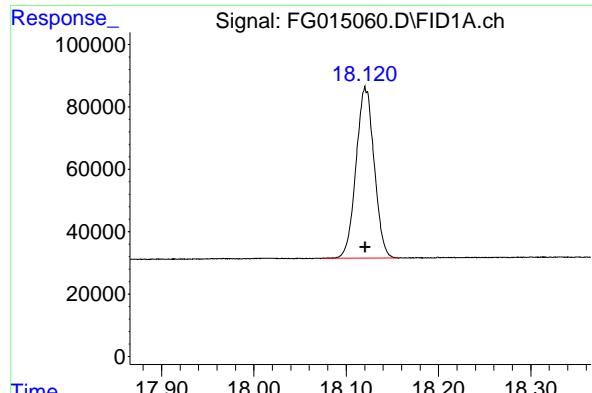
R.T.: 15.254 min  
 Delta R.T.: 0.000 min  
 Response: 725335  
 Conc: 5.05 ug/ml

## #11 N-HEXACOSANE

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

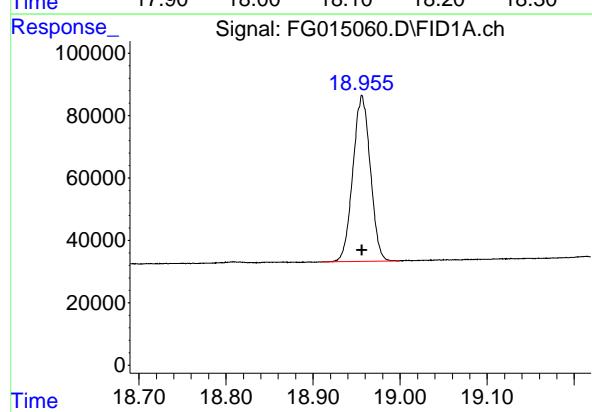
## #12 N-OCTACOSANE

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



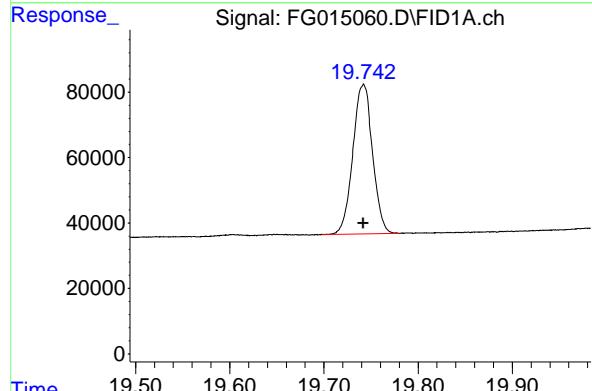
#13 N-TRIACONTANE

R.T.: 18.121 min  
Delta R.T.: 0.000 min  
Instrument: FID\_G  
Response: 746793  
Conc: 5.23 ug/ml ClientSampleId :  
5 TRPH STD



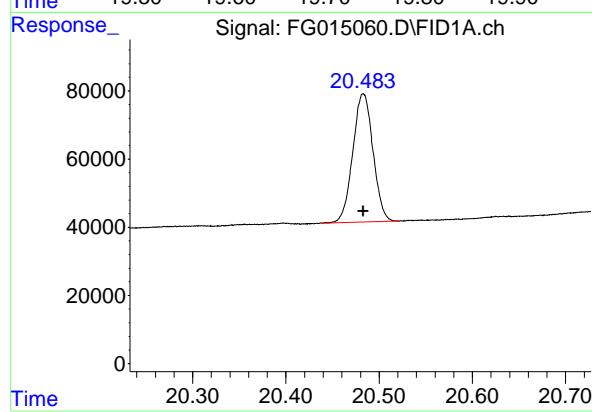
#14 N-DOTRIACONTANE

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



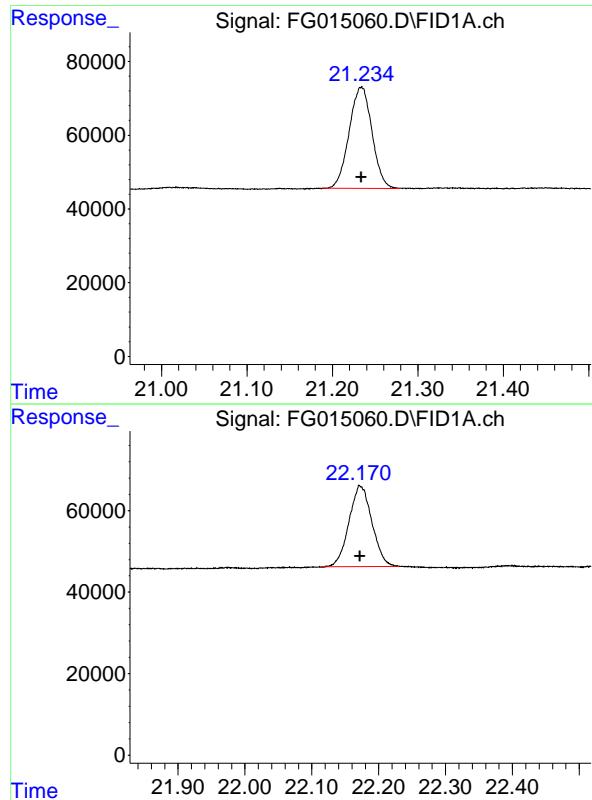
#15 N-TETRATRIACONTANE

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  
Instrument: FID\_G  
Response: 509611 ClientSampleId :  
Conc: 5.20 ug/ml 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

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 : Rx1-1ms  
 Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units
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**System Monitoring Compounds**

9) S TETRACOSANE-d50 (SURR...	15.056	11798567	91.980 ug/ml
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**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-HEXADECANE	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 &gt; 1/2 Window

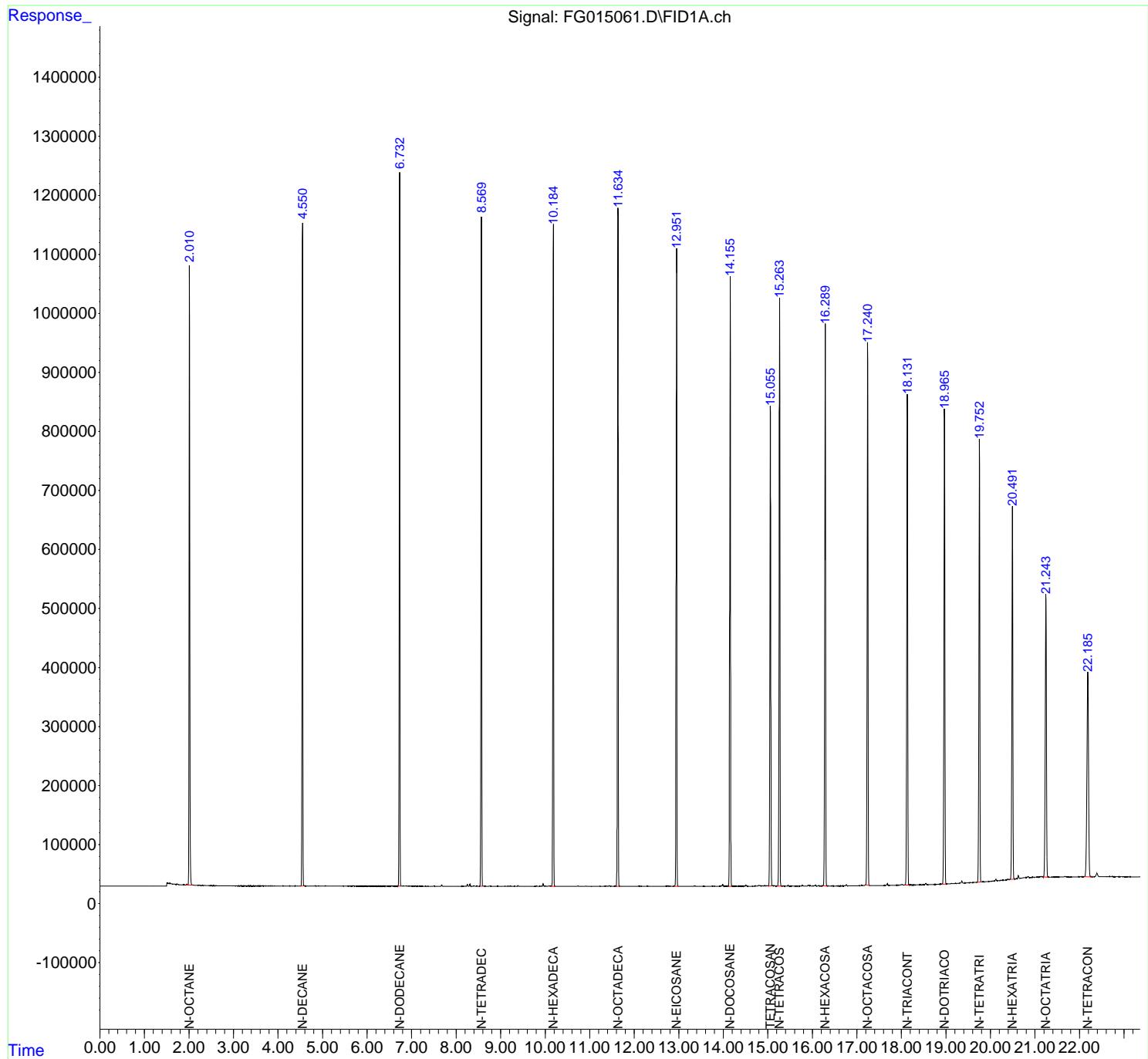
(m)=manual int.

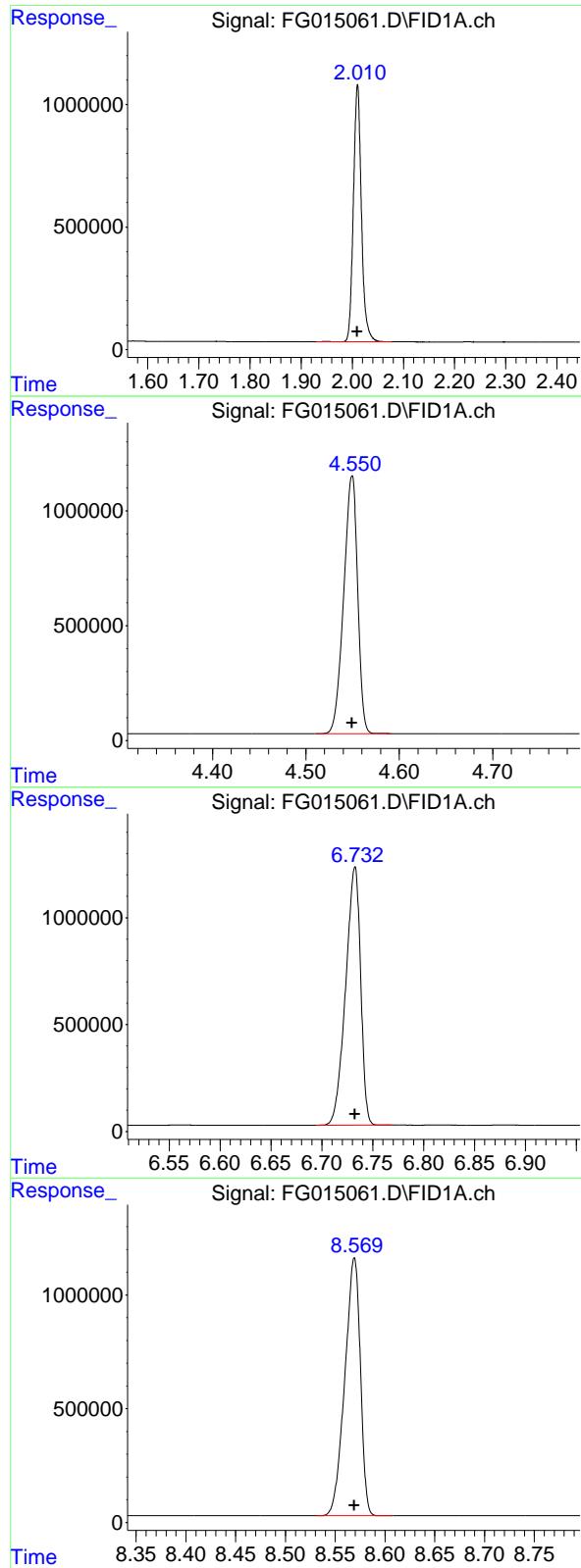
Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG011325\  
 Data File : FG015061.D  
 Signal(s) : FID1A.ch  
 Acq On : 13 Jan 2025 11:39  
 Operator : YP\AJ  
 Sample : 100 TRPH STD  
 Misc :  
 ALS Vial : 21 Sample Multiplier: 1

**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 : Rx1-1ms  
 Signal Info : 20mx0.18mmx0.18um





### #1 N-OCTANE

R.T.: 2.010 min  
 Delta R.T.: 0.000 min  
 Response: 11457523 FID\_G  
 Conc: 93.90 ug/ml ClientSampleId :  
 100 TRPH STD

### #2 N-DECANE

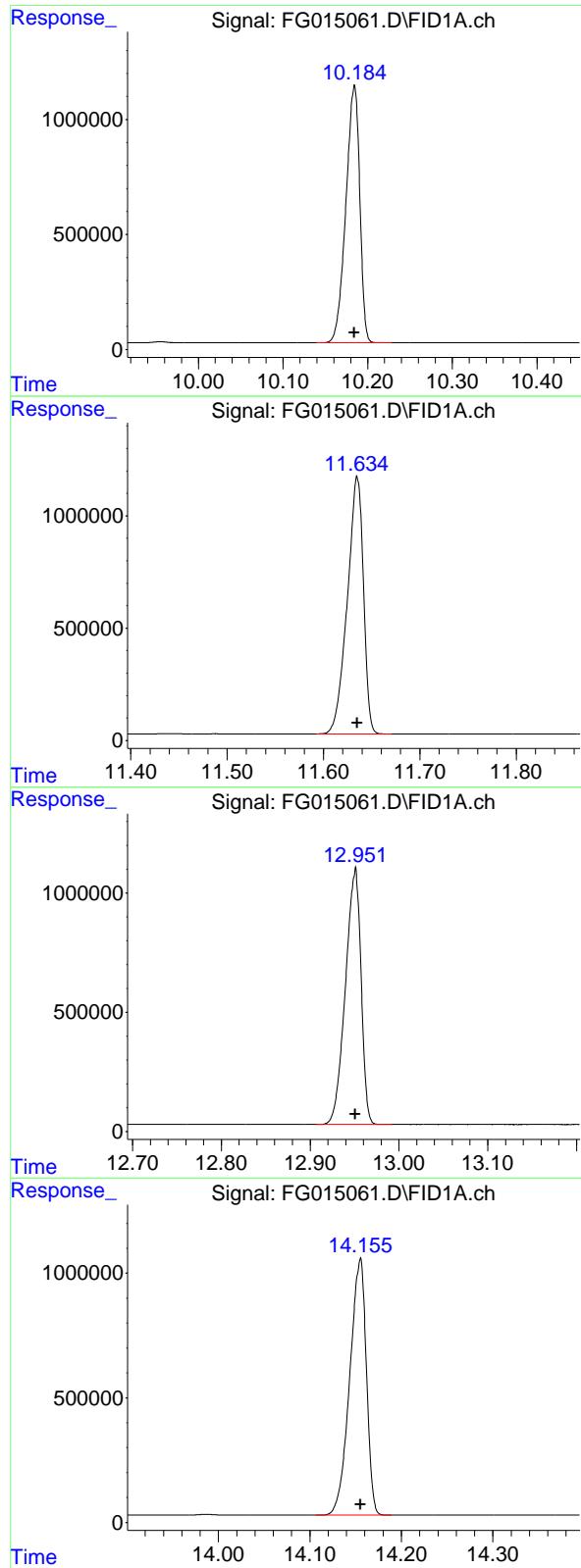
R.T.: 4.549 min  
 Delta R.T.: 0.000 min  
 Response: 11755056  
 Conc: 91.00 ug/ml

### #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 FID\_G  
 Conc: 90.27 ug/ml ClientSampleId :  
 100 TRPH STD

## #6 N-OCTADECANE

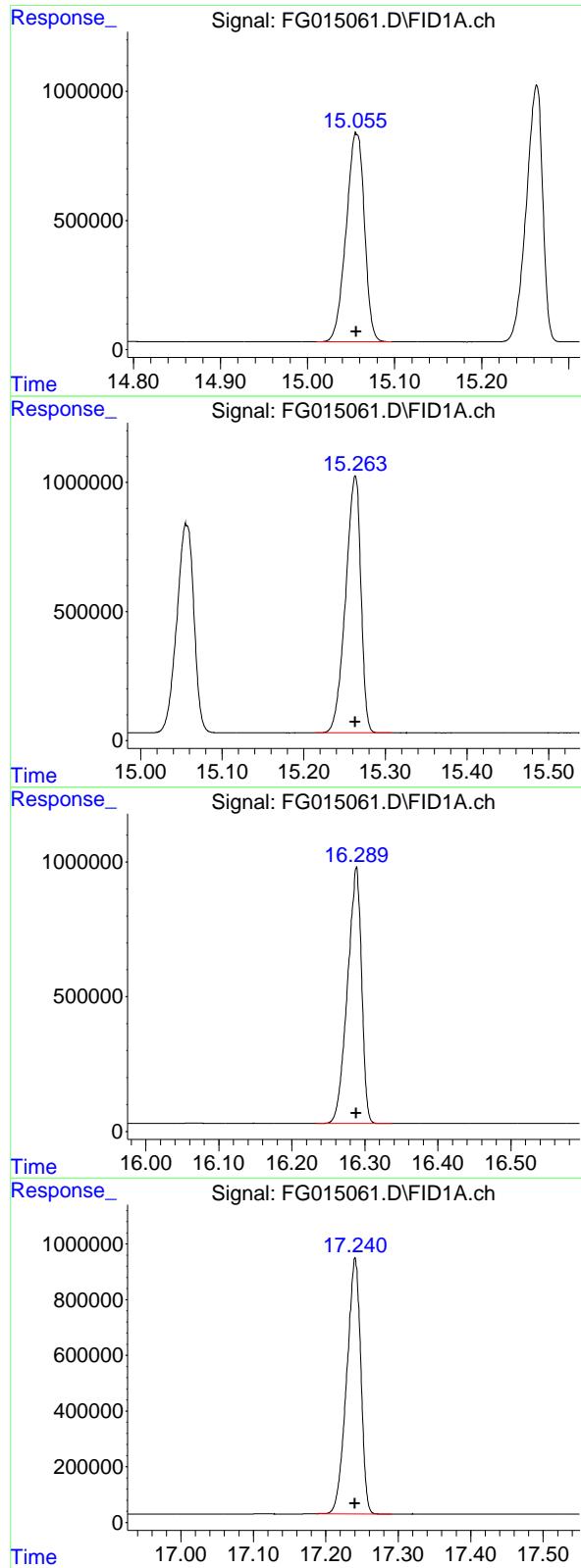
R.T.: 11.635 min  
 Delta R.T.: 0.000 min  
 Response: 13302325  
 Conc: 90.68 ug/ml

## #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

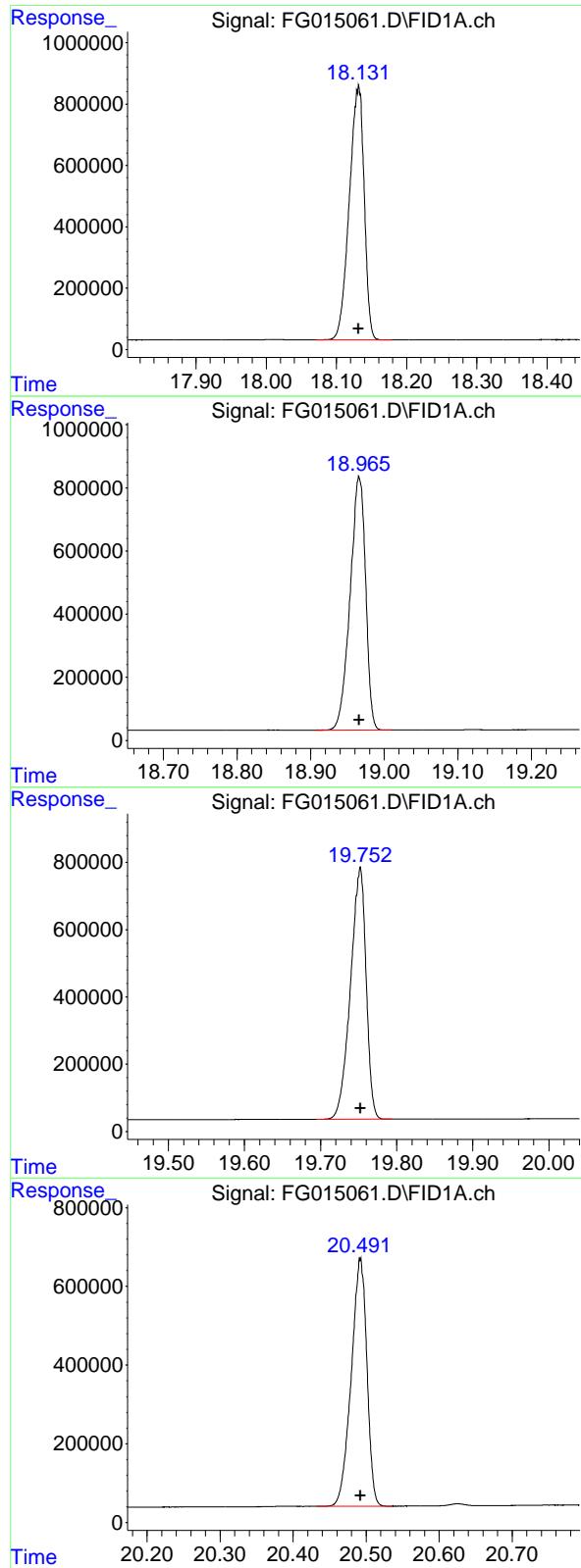
R.T.: 15.263 min  
 Delta R.T.: 0.000 min  
 Response: 12974293  
 Conc: 90.84 ug/ml

### #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 FID\_G  
 Conc: 85.61 ug/ml ClientSampleId :  
 100 TRPH STD

### #14 N-DOTRIACONTANE

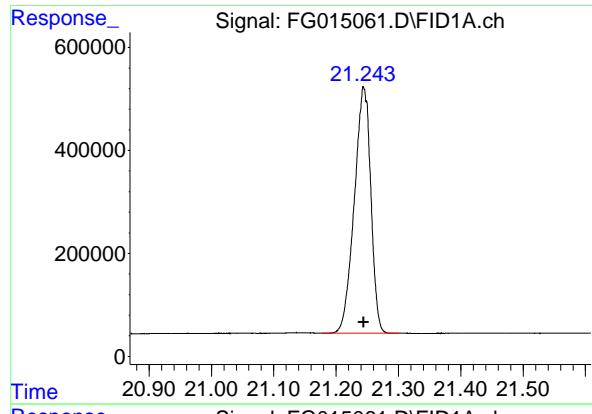
R.T.: 18.966 min  
 Delta R.T.: 0.000 min  
 Response: 11733502  
 Conc: 84.42 ug/ml

### #15 N-TETRATRIACONTANE

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

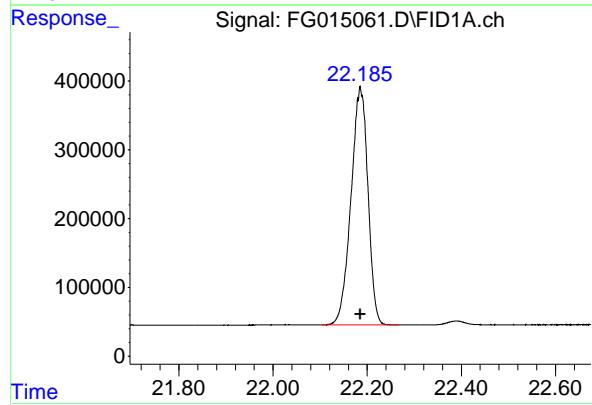
### #16 N-HEXATRIACONTANE

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  
Instrument: FID\_G  
Response: 8808855  
Conc: 89.30 ug/ml  
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

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 : Rx1-1ms  
 Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc	Units
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**System Monitoring Compounds**

9) S TETRACOSANE-d50 (SURR...	15.054	6435456	50.170	ug/ml
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**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-HEXADECOSANE	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

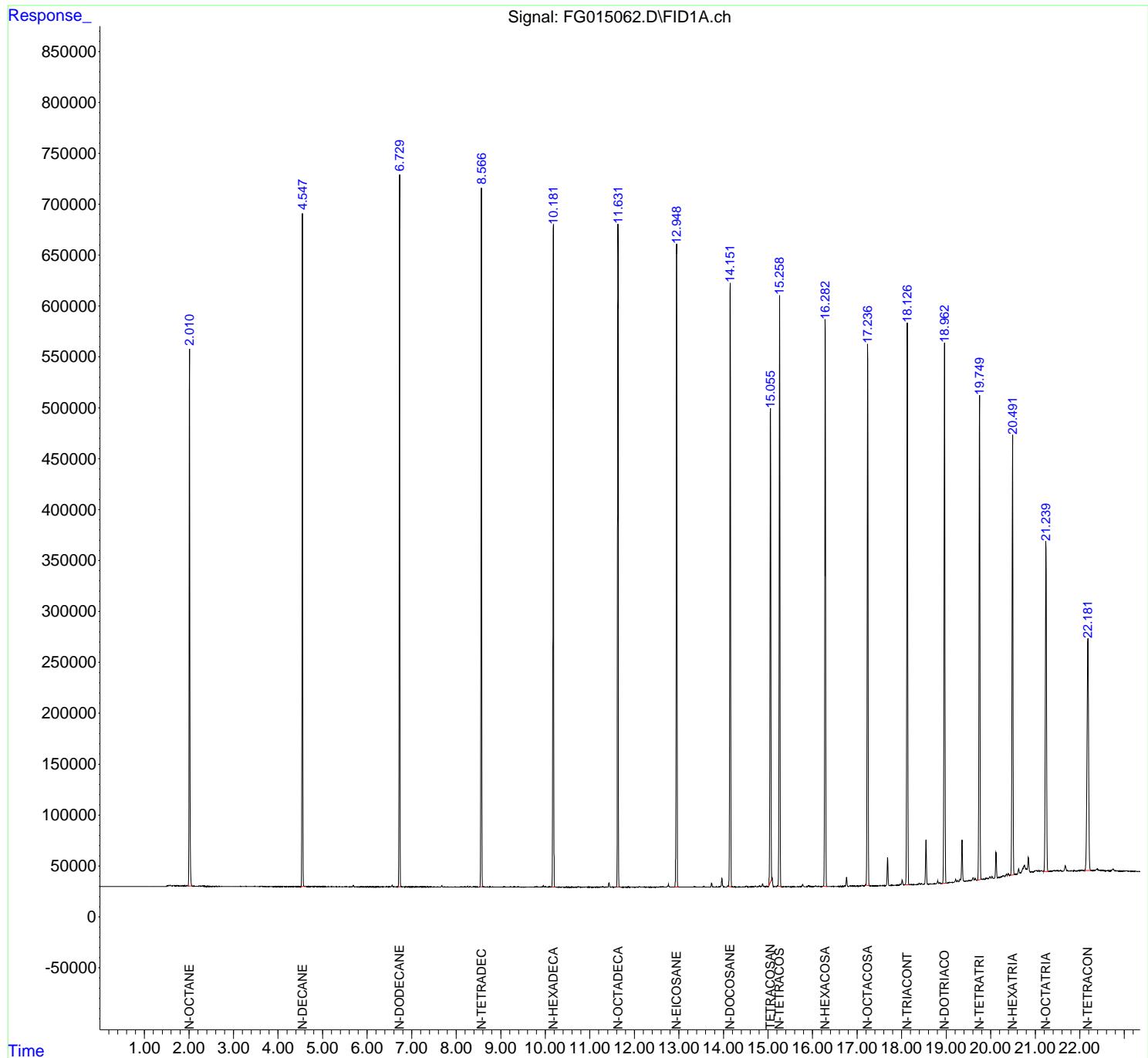
(m)=manual int.

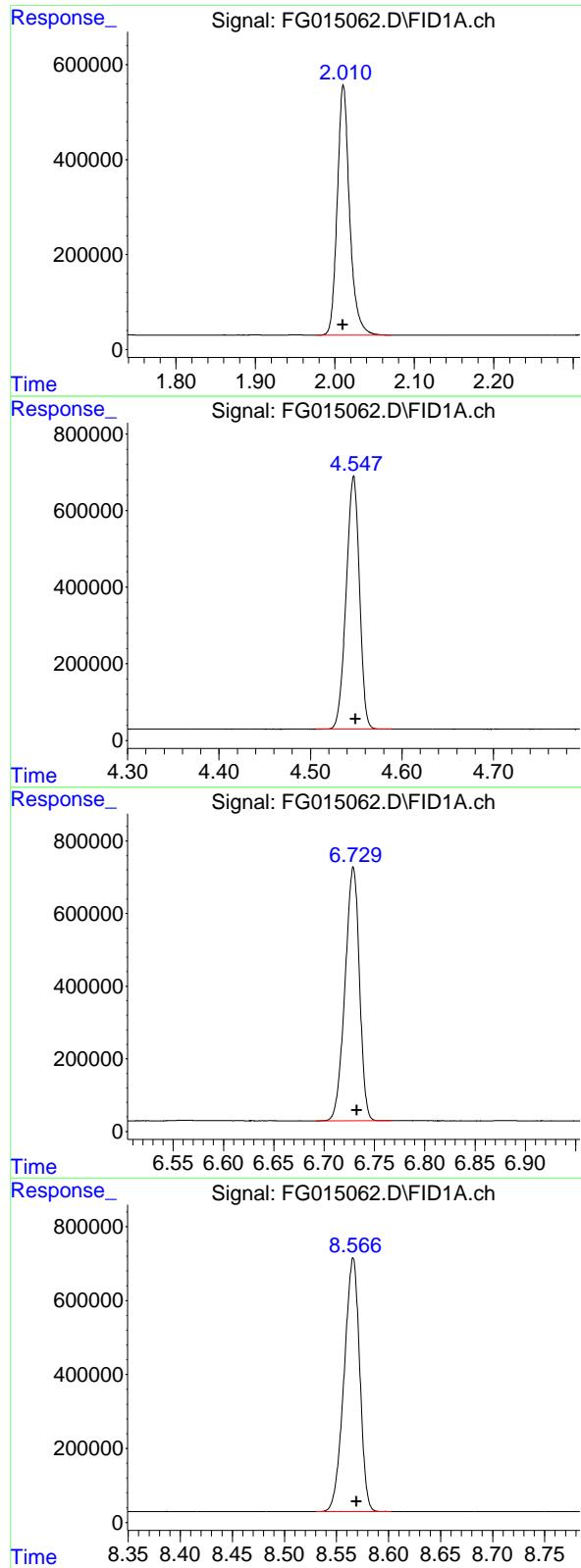
Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG011325\  
 Data File : FG015062.D  
 Signal(s) : FID1A.ch  
 Acq On : 13 Jan 2025 12:07  
 Operator : YP\AJ  
 Sample : FG011325ICV  
 Misc :  
 ALS Vial : 16 Sample Multiplier: 1

**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 : Rx1-1ms  
 Signal Info : 20mx0.18mmx0.18um





### #1 N-OCTANE

R.T.: 2.011 min  
 Delta R.T.: 0.000 min  
 Response: 5689865 FID\_G  
 Conc: 46.63 ug/ml ClientSampleId : FG011325ICV

### #2 N-DECANE

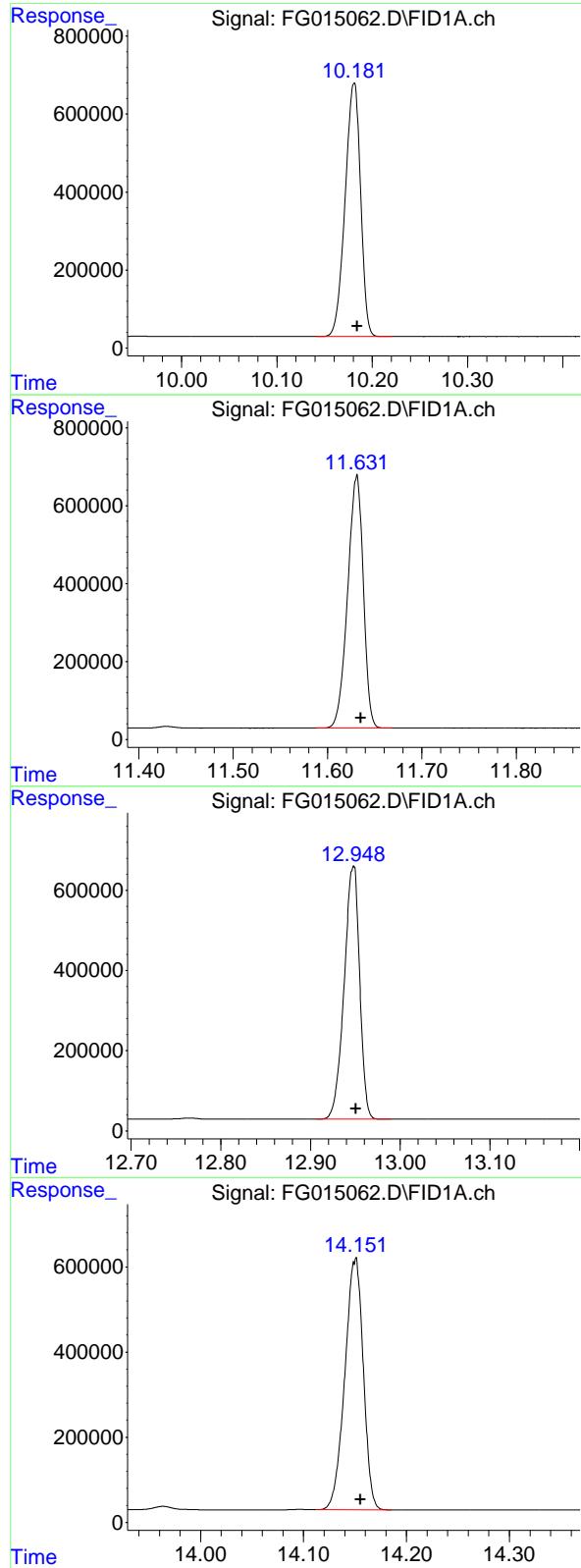
R.T.: 4.547 min  
 Delta R.T.: -0.002 min  
 Response: 6668871  
 Conc: 51.63 ug/ml

### #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 FID\_G  
 Conc: 51.68 ug/ml ClientSampleId : FG011325ICV

## #6 N-OCTADECANE

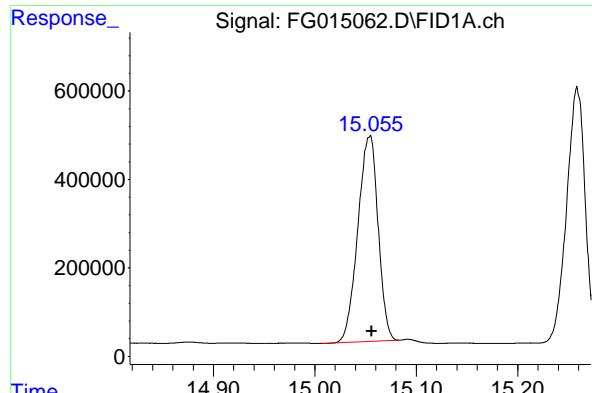
R.T.: 11.631 min  
 Delta R.T.: -0.004 min  
 Response: 7485788  
 Conc: 51.03 ug/ml

## #7 N-EICOSANE

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

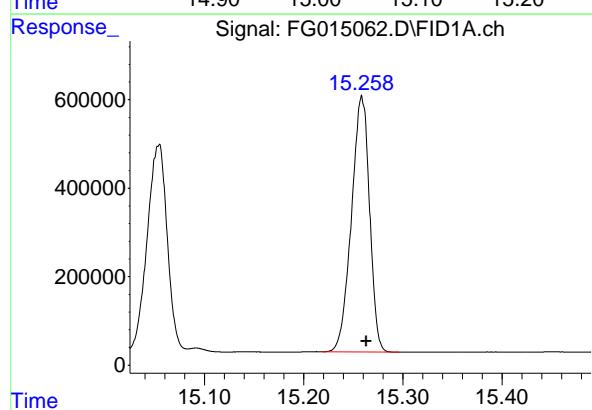
## #8 N-DOCOSANE

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



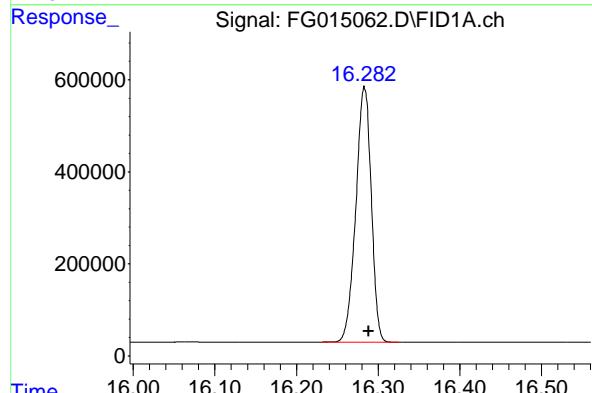
## #9 TETRACOSANE-d50 (SURROGATE)

R.T.: 15.054 min  
Delta R.T.: -0.002 min  
Instrument: FID\_G  
Response: 6435456  
Conc: 50.17 ug/ml  
ClientSampleId : FG011325ICV



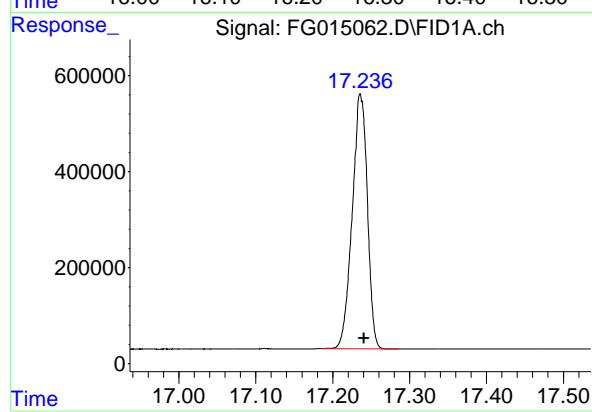
## #10 N-TETRACOSANE

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



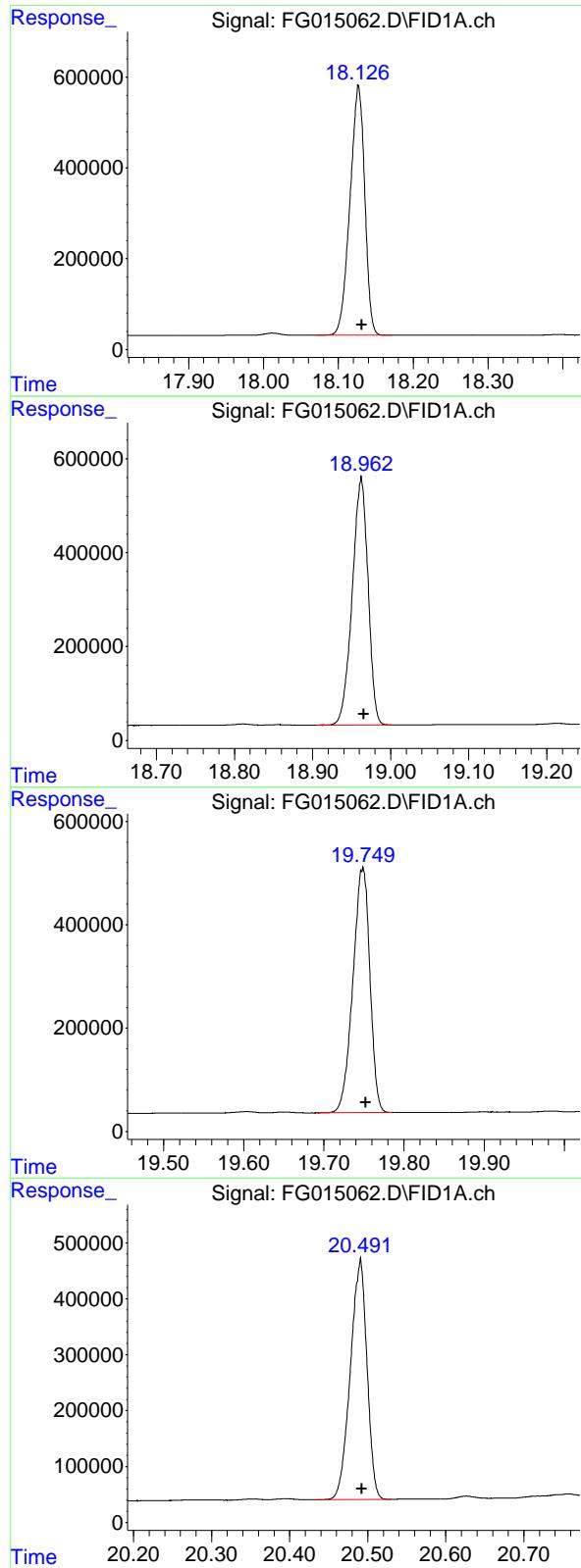
## #11 N-HEXACOSANE

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 FID\_G  
 Conc: 52.90 ug/ml ClientSampleId : FG011325ICV

## #14 N-DOTRIACONTANE

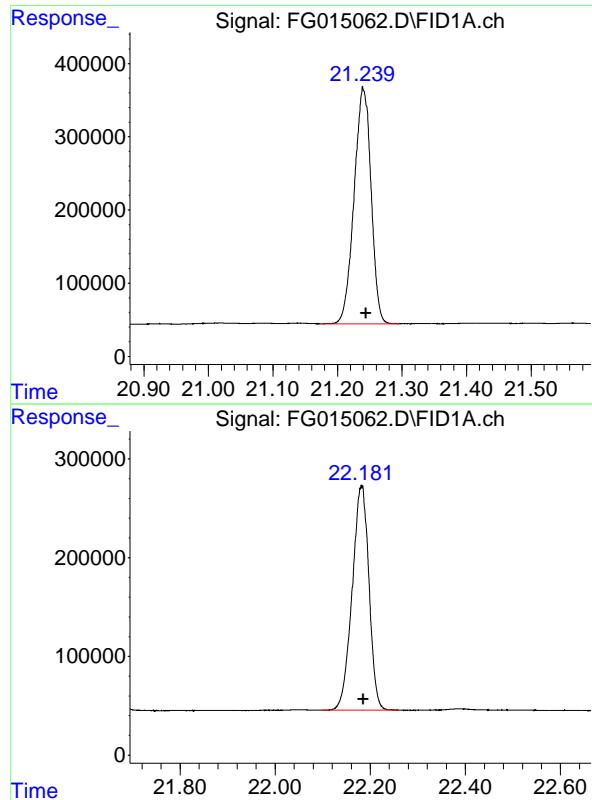
R.T.: 18.962 min  
 Delta R.T.: -0.003 min  
 Response: 7422331  
 Conc: 53.40 ug/ml

## #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 min  
Instrument: FID\_G  
Response: 5886866  
Conc: 59.68 ug/ml  
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 : FG0113251.CV  
 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



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Fax : 908 789 8922

**DIESEL RANGE ORGANICS CONTINUING CALIBRATION SUMMARY**

**50 PPM TRPH STD**

Lab Name: Chemtech Contract: RUTW01  
ProjectID: NYCDDC SANTWOBR Brooklyn Bridge BBMCR  
Lab Code: CHEM Case No.: Q1232 SAS No.: Q1232 SDG No.: Q1232  
DataFile: FE052168.D Analyst Name: YP\AJ Analyst Date: 01-31-2025

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

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

**Instrument :**  
**FID\_E**  
**ClientSampleId :**  
**50 PPM TRPH STD**

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

Volume Inj. : 1uL  
 Signal Phase : Rx1-1ms  
 Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

9) S TETRACOSANE-d50 (SURR...	15.275	4578853	45.973 ug/ml
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Target Compounds

2) N-DECANE	4.934	4273136	46.699 ug/ml
3) N-DODECANE	7.061	4628141	46.321 ug/ml
4) N-TETRADECANE	8.865	4676456	45.961 ug/ml
5) N-HEXADECANE	10.457	4890327	45.893 ug/ml
6) N-OCTADECANE	11.889	5152055	45.951 ug/ml
7) N-EICOSANE	13.190	5111168	45.890 ug/ml
8) N-DOCOSANE	14.381	5088936	45.834 ug/ml
10) N-TETRACOSANE	15.479	5083452	45.958 ug/ml
11) N-HEXACOSANE	16.494	5012750	45.984 ug/ml
12) N-OCTACOSANE	17.440	4966241	46.010 ug/ml

---

(f)=RT Delta &gt; 1/2 Window

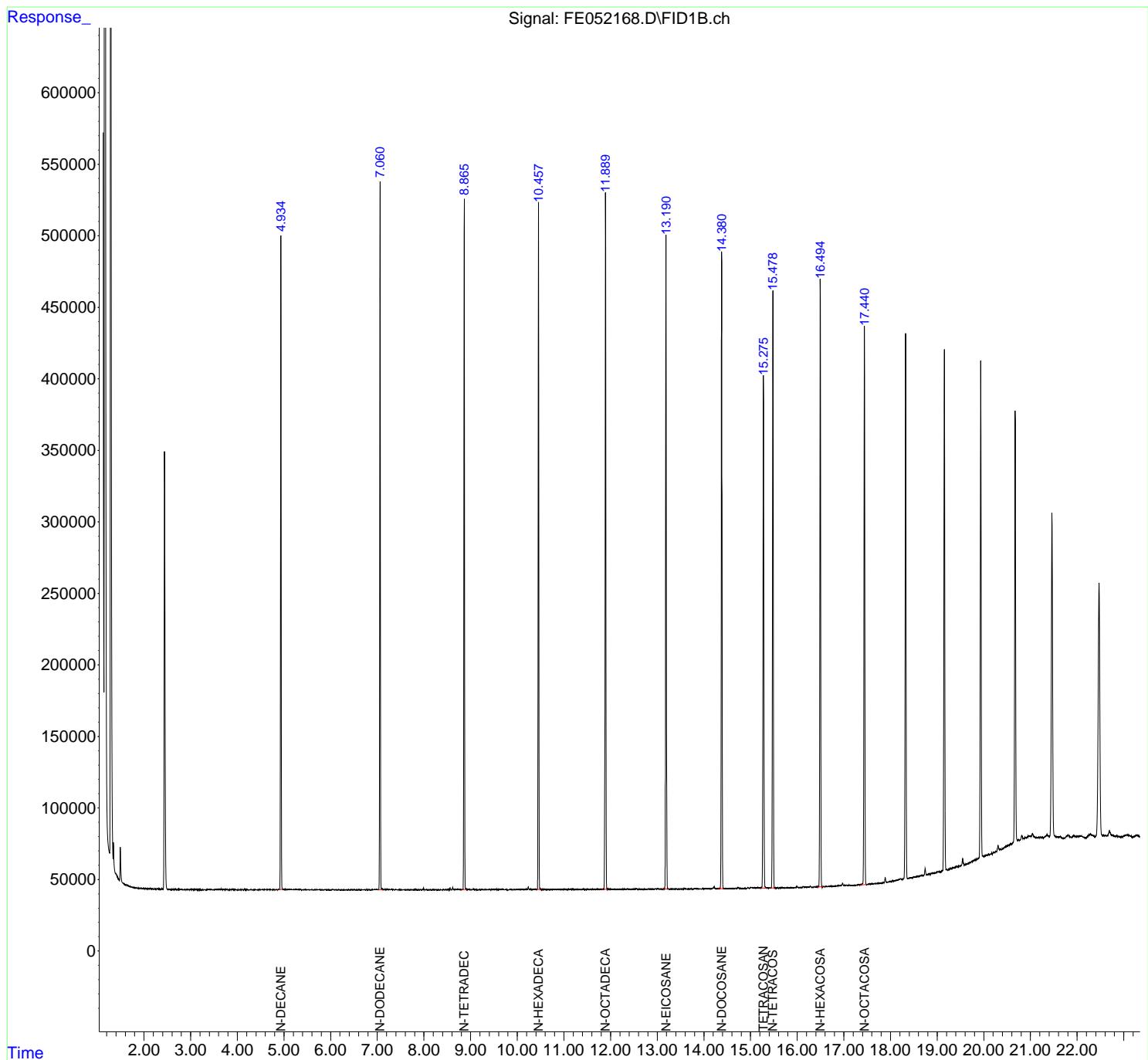
(m)=manual int.

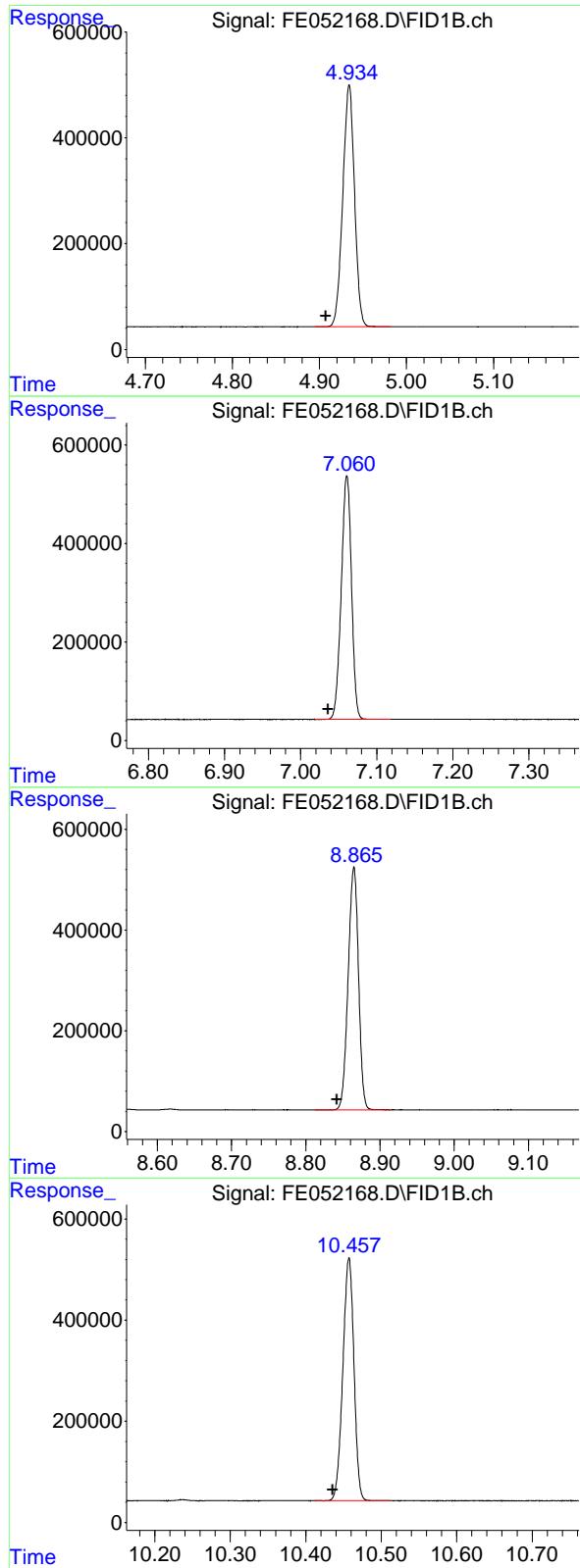
Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_E\Data\FE013125\  
 Data File : FE052168.D  
 Signal(s) : FID1B.ch  
 Acq On : 31 Jan 2025 10:26  
 Operator : YP\AJ  
 Sample : 50 PPM TRPH STD  
 Misc :  
 ALS Vial : 99 Sample Multiplier: 1

**Instrument :**  
**FID\_E**  
**ClientSampleId :**  
 50 PPM TRPH STD

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

Volume Inj. : 1uL  
 Signal Phase : Rx1-1ms  
 Signal Info : 20mx0.18mmx0.18um





## #2 N-DECANE

R.T.: 4.934 min  
 Delta R.T.: 0.027 min  
 Response: 4273136 FID\_E  
 Conc: 46.70 ug/ml ClientSampleId :  
 50 PPM TRPH STD

## #3 N-DODECANE

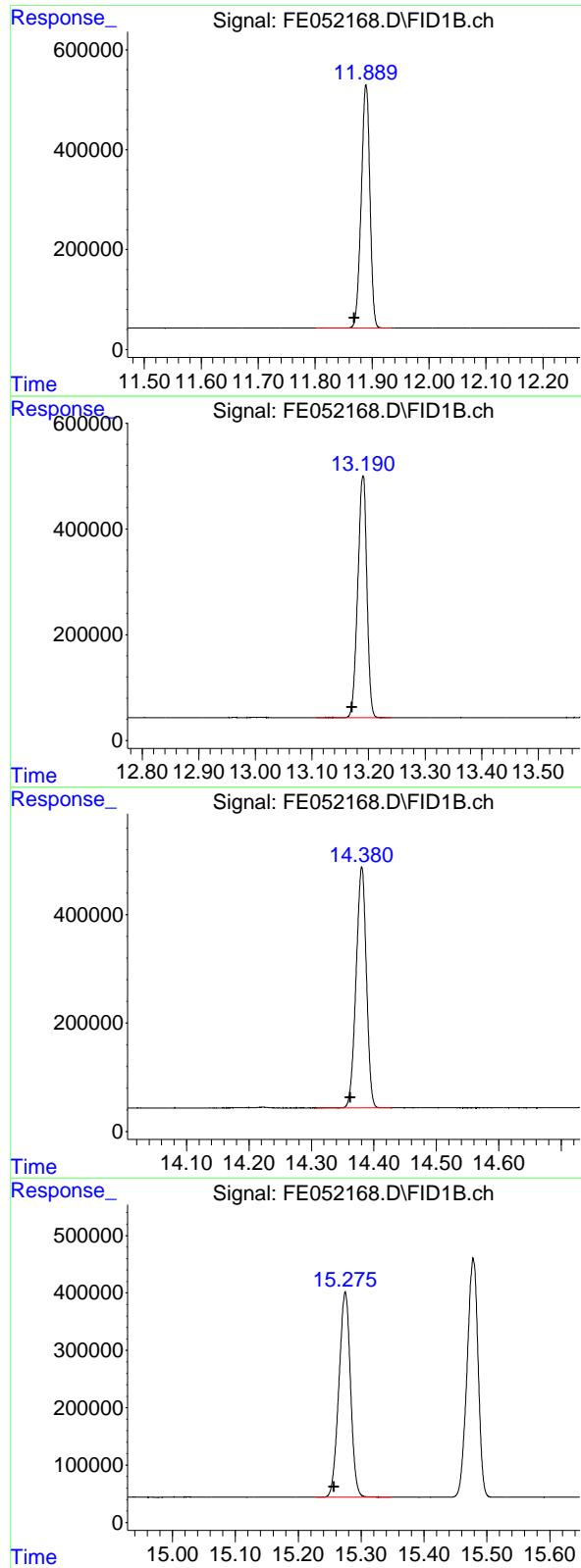
R.T.: 7.061 min  
 Delta R.T.: 0.025 min  
 Response: 4628141  
 Conc: 46.32 ug/ml

## #4 N-TETRADECANE

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

## #5 N-HEXADECANE

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



## #6 N-OCTADECANE

R.T.: 11.889 min  
 Delta R.T.: 0.020 min  
 Response: 5152055 FID\_E  
 Conc: 45.95 ug/ml ClientSampleId :  
 50 PPM TRPH STD

## #7 N-EICOSANE

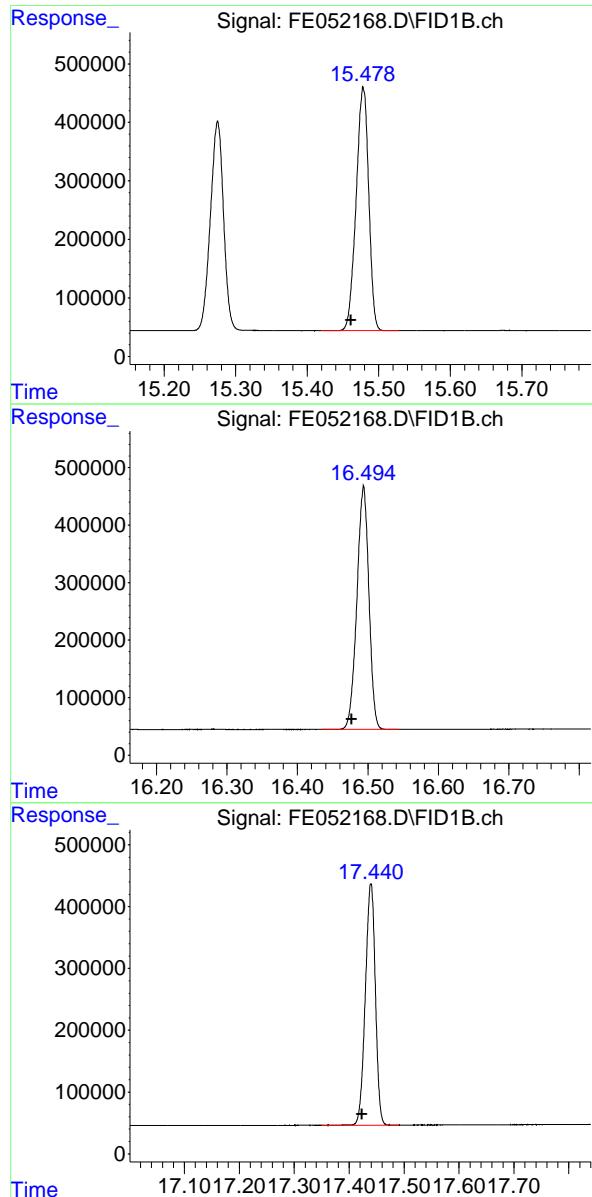
R.T.: 13.190 min  
 Delta R.T.: 0.019 min  
 Response: 5111168  
 Conc: 45.89 ug/ml

## #8 N-DOCOSANE

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

## #9 TETRACOSANE-d50 (SURROGATE)

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



### #10 N-TETRACOSANE

R.T.: 15.479 min  
 Delta R.T.: 0.017 min  
 Response: 5083452 FID\_E  
 Conc: 45.96 ug/ml ClientSampleId :  
 50 PPM TRPH STD

### #11 N-HEXACOSANE

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

### #12 N-OCTACOSANE

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

## rteres

## Area Percent Report

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

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID\_E\methods\FE012325.M  
Title :

Signal : FID1B.ch

peak #	R. T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4. 934	4. 895	4. 982	BB	456654	4273136	82. 94%	7. 993%
2	7. 061	7. 019	7. 118	BB	494802	4628141	89. 83%	8. 657%
3	8. 865	8. 812	8. 914	BB	482694	4676456	90. 77%	8. 747%
4	10. 457	10. 412	10. 512	BB	480202	4890327	94. 92%	9. 147%
5	11. 889	11. 802	11. 934	BB	485820	5152055	100. 00%	9. 637%
6	13. 190	13. 107	13. 241	BB	457572	5111168	99. 21%	9. 560%
7	14. 381	14. 307	14. 428	BB	444784	5088936	98. 77%	9. 519%
8	15. 275	15. 228	15. 348	BV	358328	4578853	88. 87%	8. 565%
9	15. 479	15. 421	15. 528	BB	416344	5083452	98. 67%	9. 509%
10	16. 494	16. 435	16. 544	BB	424362	5012750	97. 30%	9. 376%
11	17. 440	17. 351	17. 491	BB	389525	4966241	96. 39%	9. 289%
				Sum of corrected areas:		53461515		

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



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**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.: Q1232 SAS No.: Q1232 SDG No.: Q1232  
DataFile: FE052180.D Analyst Name: YP\AJ Analyst Date: 01-31-2025

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

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

**Instrument :**  
**FID\_E**  
**ClientSampleId :**  
**50 PPM TRPH STD**

**Manual Integrations**  
**APPROVED**

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

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

Volume Inj. : 1uL  
 Signal Phase : Rx1-1ms  
 Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units
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**System Monitoring Compounds**

9) S TETRACOSANE-d50 (SURR...	15.299	4338284	43.558 ug/mlm
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**Target Compounds**

2) N-DECANE	4.966	4142020	45.266 ug/ml
3) N-DODECANE	7.091	4467752	44.715 ug/ml
4) N-TETRADECANE	8.893	4500991	44.237 ug/ml
5) N-HEXADECANE	10.485	4687325	43.988 ug/ml
6) N-OCTADECANE	11.916	4920557	43.886 ug/ml
7) N-EICOSANE	13.216	4863865	43.669 ug/ml
8) N-DOCOSANE	14.407	4819958	43.411 ug/ml
10) N-TETRACOSANE	15.504	4835161	43.713 ug/ml
11) N-HEXACOSANE	16.518	4750373	43.578 ug/ml
12) N-OCTACOSANE	17.464	4722311	43.750 ug/mlm

(f)=RT Delta > 1/2 Window

(m)=manual int.

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

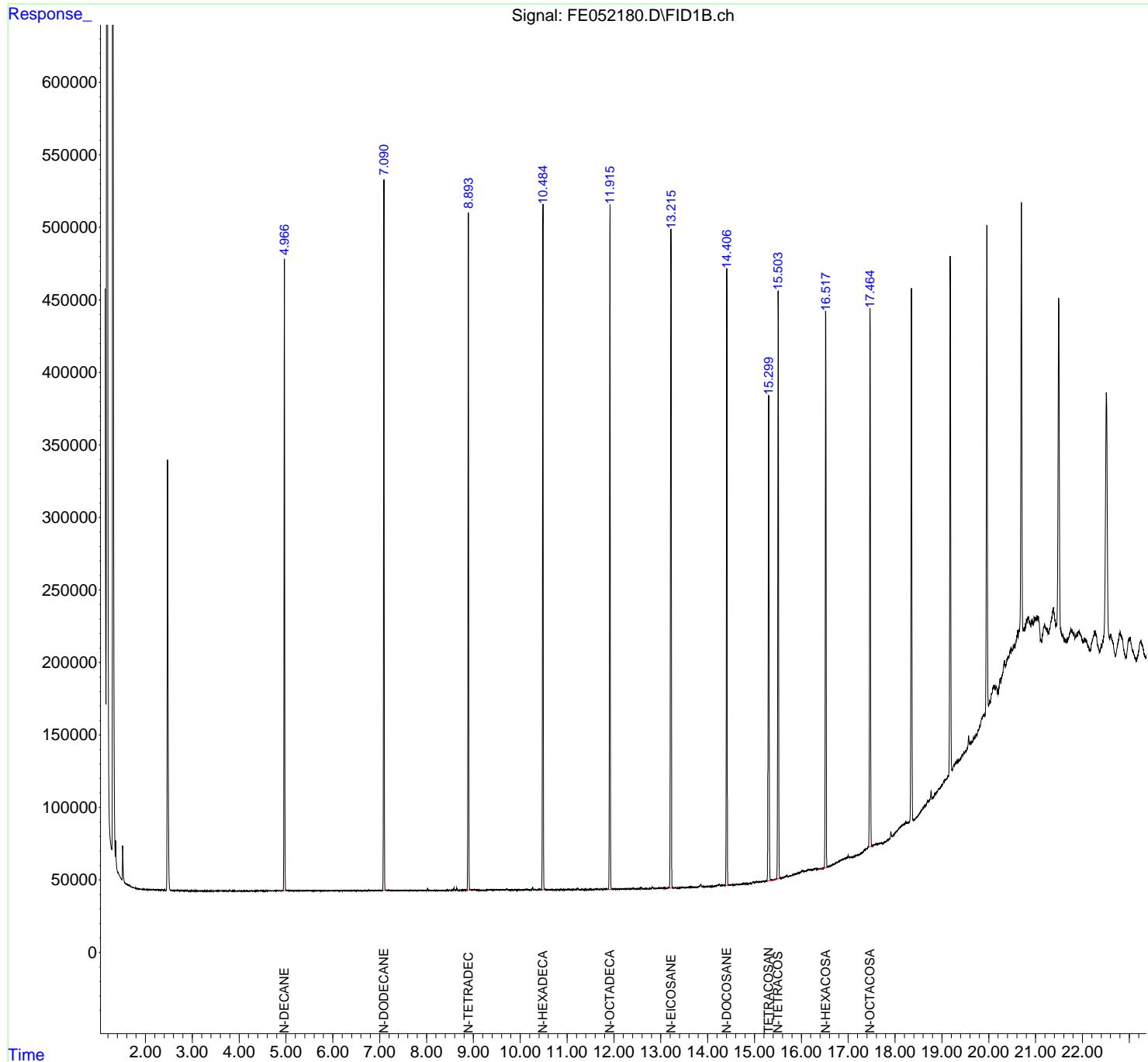
**Instrument :**  
**FID\_E**  
**ClientSampleId :**  
 50 PPM TRPH STD

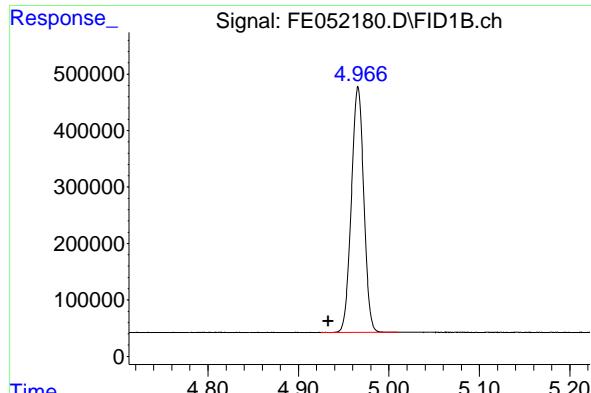
Integration File: autoint1.e  
 Quant Time: Feb 03 01:35:46 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_E\methods\FE012325.M  
 Quant Title :  
 QLast Update : Fri Jan 24 03:06:38 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1uL  
 Signal Phase : Rx1-1ms  
 Signal Info : 20mx0.18mmx0.18um

**Manual Integrations**  
**APPROVED**

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



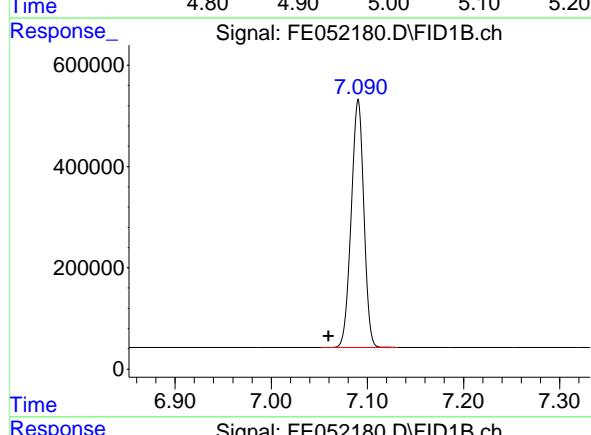


## #2 N-DECANE

R.T.: 4.966 min  
 Delta R.T.: 0.033 min  
 Response: 4142020 FID\_E  
 Conc: 45.27 ug/ml ClientSampleId :  
 50 PPM TRPH STD

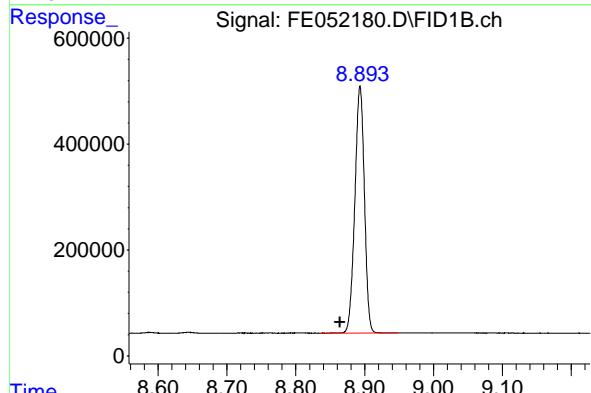
**Manual Integrations  
APPROVED**

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



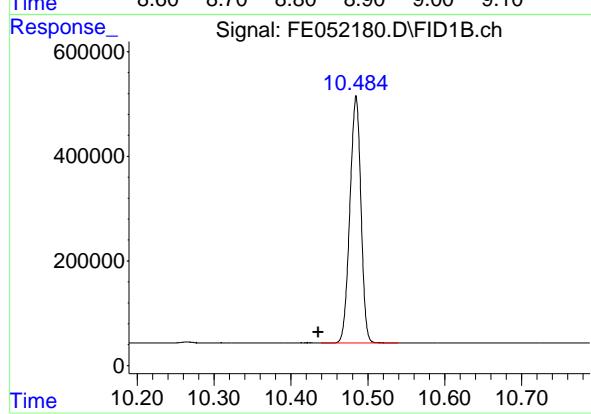
## #3 N-DODECANE

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



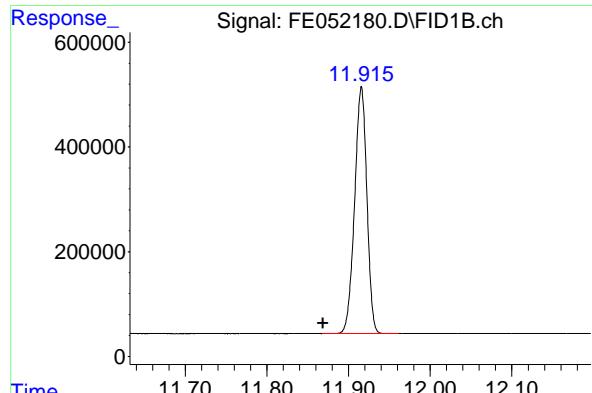
## #4 N-TETRADECANE

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



## #5 N-HEXADECANE

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

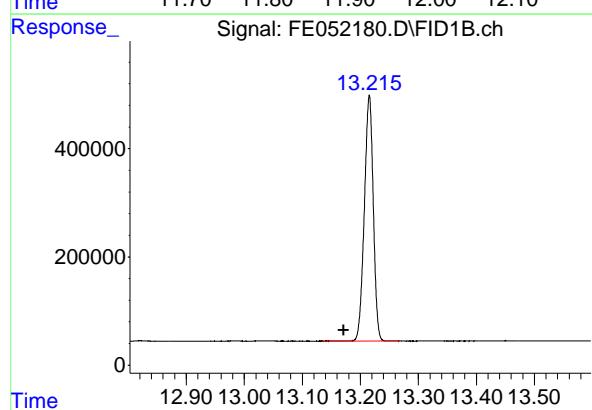


#6 N-OCTADECANE

R.T.: 11.916 min  
 Delta R.T.: 0.047 min  
 Response: 4920557 FID\_E  
 Conc: 43.89 ug/ml ClientSampleId :  
 50 PPM TRPH STD

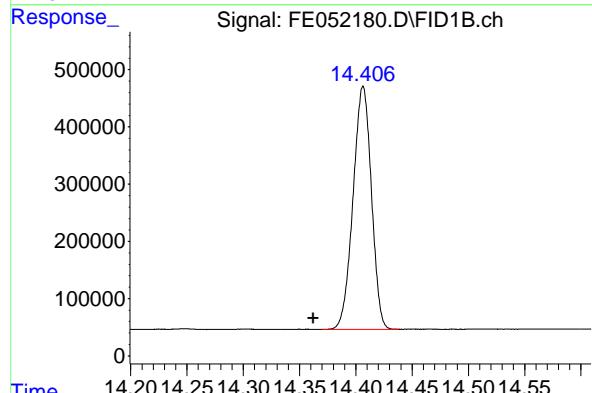
**Manual Integrations  
APPROVED**

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



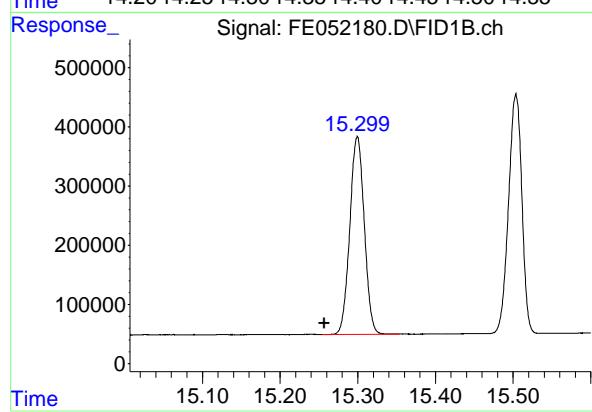
#7 N-EICOSANE

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



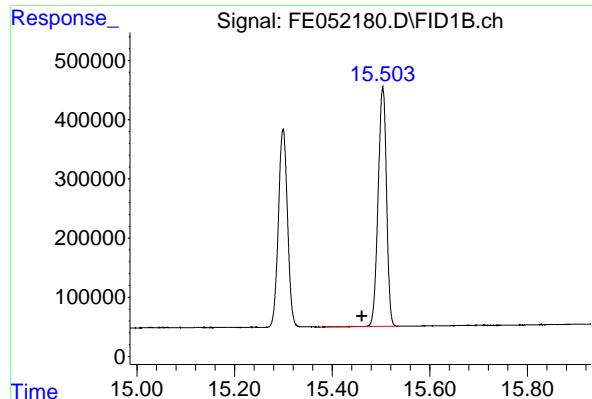
#8 N-DOCOSANE

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



#9 TETRACOSANE-d50 (SURROGATE)

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

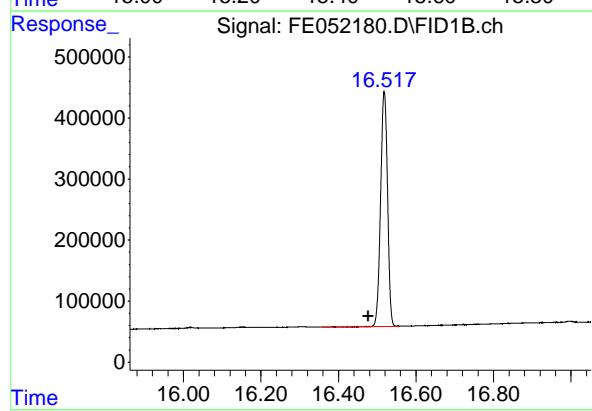


#10 N-TETRACOSANE

R.T.: 15.504 min  
 Delta R.T.: 0.043 min  
 Response: 4835161 FID\_E  
 Conc: 43.71 ug/ml ClientSampleId :  
 50 PPM TRPH STD

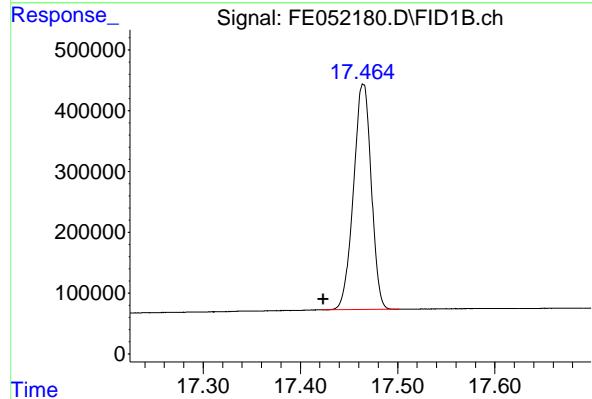
**Manual Integrations  
APPROVED**

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



#11 N-HEXACOSANE

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



#12 N-OCTACOSANE

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_E\Data\FE01312  
 Data File : FE052180.D  
 Signal (s) : FID1B.ch  
 Acq On : 31 Jan 2025 16: 40  
 Sample : 50 PPM TRPH STD  
 Misc :  
 ALS Vi al : 99 Sample Multi plier: 1

**Instrument :**

FID\_E

**LabSampleId :**

50 PPM TRPH STD

**Area Percent Report**
**Manual Integrations APPROVED**

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

**Integration File:** autoint1.e

**Method** : Z:\pestpcbsrv\HPCHEM1\FID\_E\methods\FE012325.M  
**Title** :

**Signal** : FID1B.ch

peak #	R. T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4. 966	4. 925	5. 010	BB	435252	4142020	84. 18%	8. 108%
2	7. 091	7. 052	7. 132	BB	489980	4467752	90. 80%	8. 746%
3	8. 893	8. 837	8. 948	BB	466717	4500991	91. 47%	8. 811%
4	10. 485	10. 439	10. 539	BB	472426	4687325	95. 26%	9. 176%
5	11. 916	11. 867	11. 962	BB	472102	4920557	100. 00%	9. 632%
6	13. 216	13. 134	13. 267	BB	454165	4863865	98. 85%	9. 521%
7	14. 407	14. 370	14. 438	PB	425472	4819958	97. 96%	9. 435%
8	15. 300	15. 141	15. 375	BB	333995	4340391	88. 21%	8. 497%
9	15. 504	15. 379	15. 537	BB	404444	4835161	98. 26%	9. 465%
10	16. 518	16. 357	16. 556	BV	382436	4750373	96. 54%	9. 299%
11	17. 465	17. 069	17. 499	BV	370977	4754852	96. 63%	9. 308%
				Sum of corrected areas:		51083244		

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



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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.: Q1232 SAS No.: Q1232 SDG No.: Q1232  
DataFile: FE052190.D Analyst Name: YP\AJ Analyst Date: 01-31-2025

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

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

**Instrument :**  
**FID\_E**  
**ClientSampleId :**  
**50 PPM TRPH STD**

**Manual Integrations**  
**APPROVED**

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

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

Volume Inj. : 1uL  
 Signal Phase : Rx1-1ms  
 Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units
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**System Monitoring Compounds**

9) S TETRACOSANE-d50 (SURR...	15.300	4365755	43.833 ug/ml
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**Target Compounds**

2) N-DECANE	4.963	4159030	45.452 ug/ml
3) N-DODECANE	7.088	4494120	44.979 ug/ml
4) N-TETRADECANE	8.892	4533699	44.558 ug/ml
5) N-HEXADECANE	10.483	4731275	44.401 ug/ml
6) N-OCTADECANE	11.914	4963662	44.270 ug/ml
7) N-EICOSANE	13.215	4892146	43.923 ug/ml
8) N-DOCOSANE	14.406	4844018	43.628 ug/ml
10) N-TETRACOSANE	15.503	4865994	43.992 ug/ml
11) N-HEXACOSANE	16.518	4778892	43.839 ug/ml
12) N-OCTACOSANE	17.462	4739663	43.910 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

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

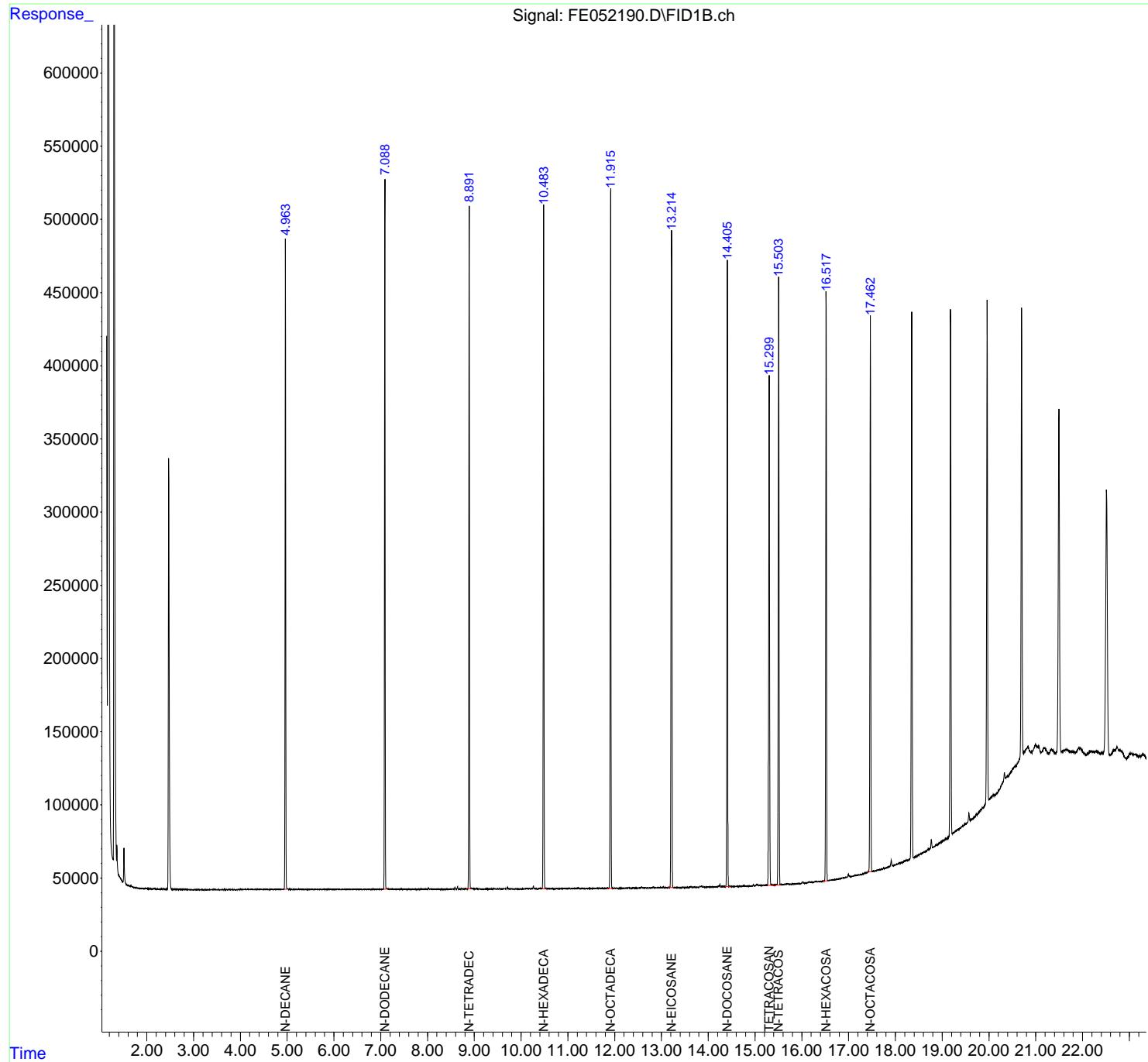
**Instrument :**  
**FID\_E**  
**ClientSampleId :**  
 50 PPM TRPH STD

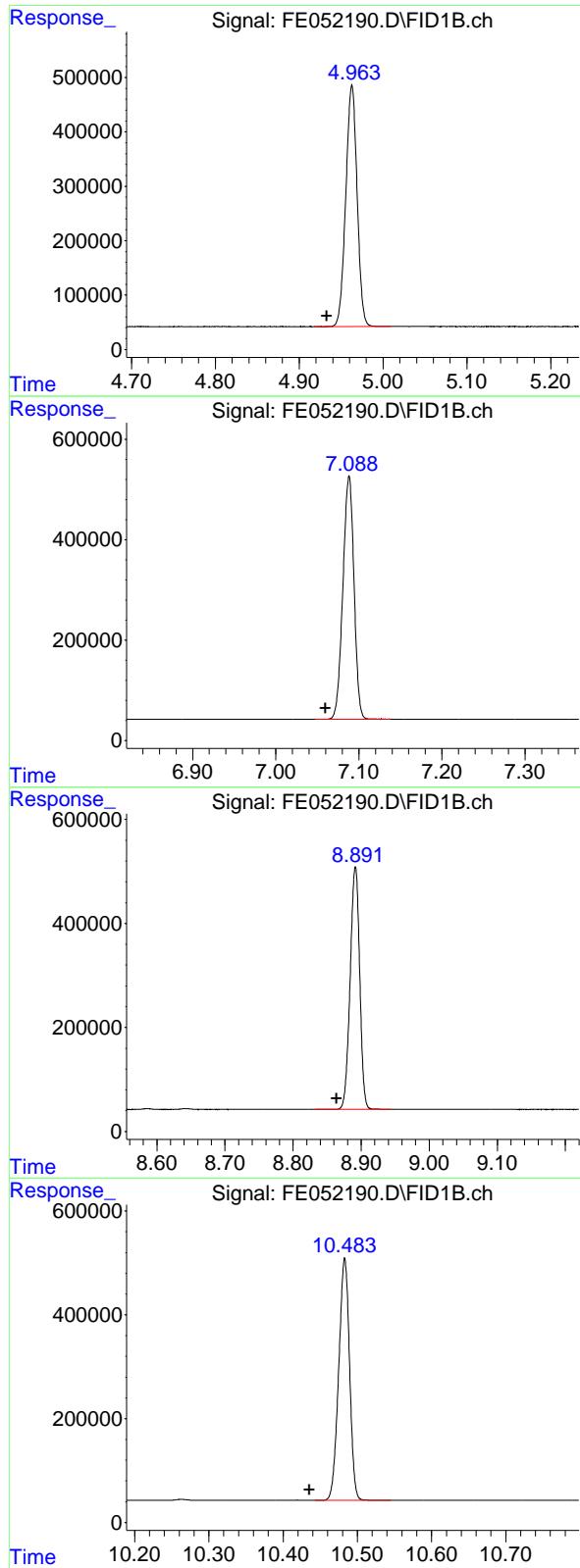
Integration File: autoint1.e  
 Quant Time: Feb 03 01:36:59 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_E\methods\FE012325.M  
 Quant Title :  
 QLast Update : Fri Jan 24 03:06:38 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1uL  
 Signal Phase : Rx1-1ms  
 Signal Info : 20mx0.18mmx0.18um

### Manual Integrations APPROVED

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





## #2 N-DECANE

R.T.: 4.963 min  
 Delta R.T.: 0.030 min  
 Response: 4159030 FID\_E  
 Conc: 45.45 ug/ml ClientSampleId :  
 50 PPM TRPH STD

**Manual Integrations  
APPROVED**

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

## #3 N-DODECANE

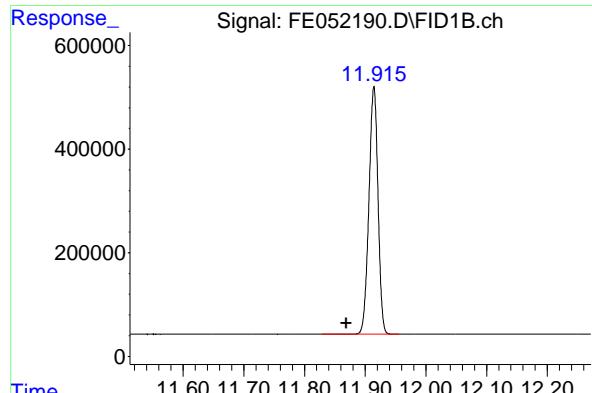
R.T.: 7.088 min  
 Delta R.T.: 0.028 min  
 Response: 4494120  
 Conc: 44.98 ug/ml

## #4 N-TETRADECANE

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

## #5 N-HEXADECANE

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

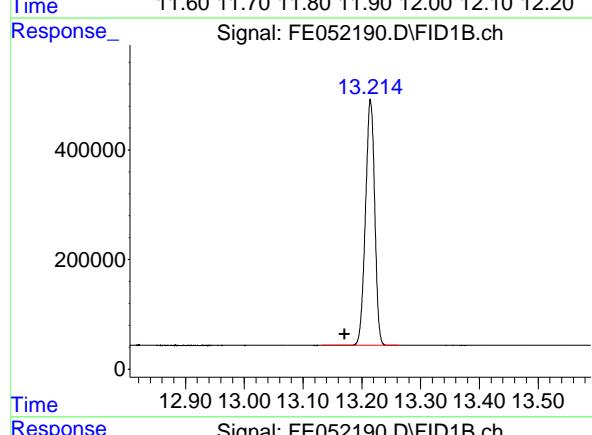


#6 N-OCTADECANE

R.T.: 11.914 min  
 Delta R.T.: 0.045 min  
 Response: 4963662 FID\_E  
 Conc: 44.27 ug/ml ClientSampleId :  
 50 PPM TRPH STD

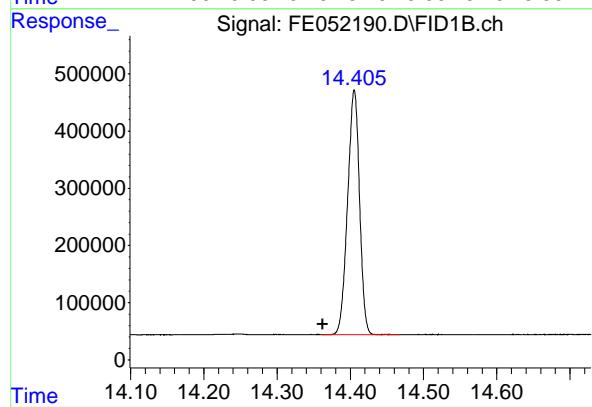
**Manual Integrations  
APPROVED**

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



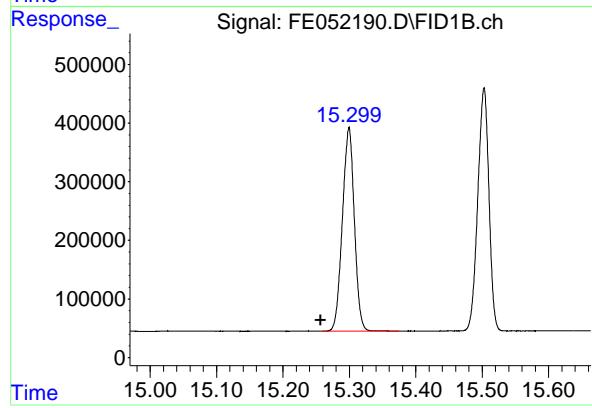
#7 N-EICOSANE

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



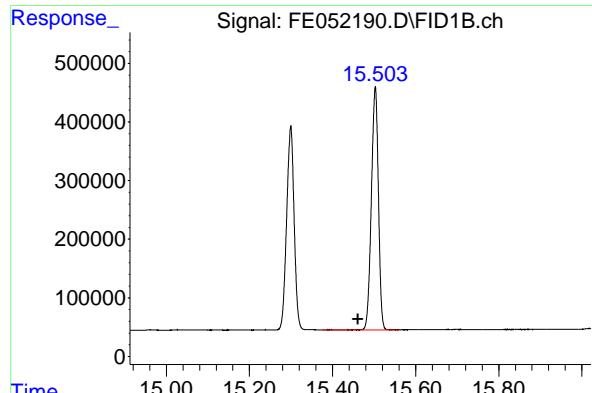
#8 N-DOCOSANE

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



#9 TETRACOSANE-d50 (SURROGATE)

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

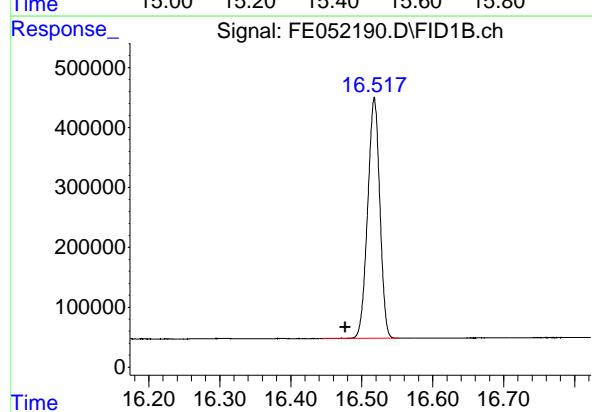


### #10 N-TETRACOSANE

R.T.: 15.503 min  
 Delta R.T.: 0.042 min  
 Response: 4865994 FID\_E  
 Conc: 43.99 ug/ml ClientSampleId :  
 50 PPM TRPH STD

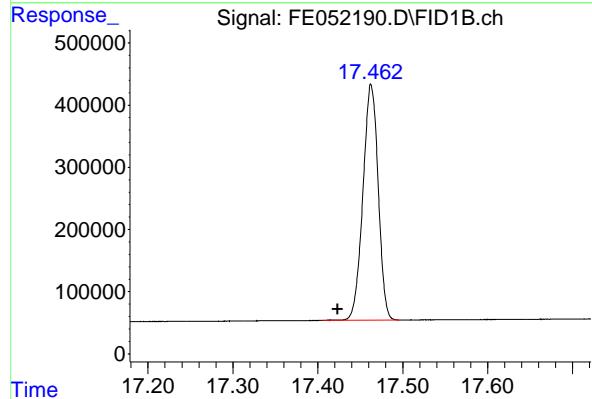
#### Manual Integrations APPROVED

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



### #11 N-HEXACOSANE

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



### #12 N-OCTACOSANE

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

rteres

**Instrument :**

FID\_E

**LabSampleId :**

50 PPM TRPH STD

**Area Percent Report**

**Manual Integrations APPROVED**

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

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

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID\_E\methods\FE012325.M  
Title :

Signal : FID1B.ch

peak #	R. T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4. 963	4. 919	5. 009	BB	444623	4159030	83. 79%	8. 099%
2	7. 088	7. 047	7. 138	BB	484231	4494120	90. 54%	8. 751%
3	8. 892	8. 832	8. 943	BB	466689	4533699	91. 34%	8. 828%
4	10. 483	10. 443	10. 545	BB	467195	4731275	95. 32%	9. 213%
5	11. 914	11. 829	11. 956	BV	478751	4963662	100. 00%	9. 665%
6	13. 215	13. 132	13. 263	BB	447007	4892146	98. 56%	9. 526%
7	14. 406	14. 361	14. 466	BB	427712	4844018	97. 59%	9. 432%
8	15. 300	15. 259	15. 375	BV	348585	4365755	87. 95%	8. 501%
9	15. 503	15. 375	15. 560	PB	415200	4865994	98. 03%	9. 475%
10	16. 518	16. 444	16. 552	BB	402585	4778892	96. 28%	9. 306%
11	17. 463	17. 044	17. 501	BB	378377	4726578	95. 22%	9. 204%
				Sum of corrected areas:		51355168		

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



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Fax : 908 789 8922

**DIESEL RANGE ORGANICS CONTINUING CALIBRATION SUMMARY**

**50 PPM TRPH STD**

Lab Name: Chemtech Contract: RUTW01  
ProjectID: NYCDDC SANTWOBR Brooklyn Bridge BBMCR  
Lab Code: CHEM Case No.: Q1232 SAS No.: Q1232 SDG No.: Q1232  
DataFile: FG015283.D Analyst Name: YP\AJ Analyst Date: 01-31-2025

Conc. (PPM)	Area Count	RF	Average RF	%D
500	70835484	141671	140262	1.005

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG013125\  
 Data File : FG015283.D  
 Signal(s) : FID1A.ch  
 Acq On : 31 Jan 2025 16:17  
 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 02/03/2025  
 Supervised By :Ankita Jodhani 02/03/2025

Integration File: autoint1.e  
 Quant Time: Feb 01 01:16:27 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 : Rx1-1ms  
 Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units
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**System Monitoring Compounds**

9) S TETRACOSANE-d50 (SURR...	15.069	6434170	50.160 ug/ml
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**Target Compounds**

2) N-DECANE	4.550	6845031	52.991 ug/ml
3) N-DODECANE	6.735	7102993	52.137 ug/ml
4) N-TETRADECANE	8.574	7092897	51.824 ug/ml
5) N-HEXADECANE	10.191	7206608	51.070 ug/ml
6) N-OCTADECANE	11.642	7372867	50.263 ug/ml
7) N-EICOSANE	12.960	7307969	50.266 ug/ml
8) N-DOCOSANE	14.165	7094223	49.450 ug/ml
10) N-TETRACOSANE	15.275	7024640	49.183 ug/ml
11) N-HEXACOSANE	16.300	6886344	48.895 ug/mlm
12) N-OCTACOSANE	17.255	6901912	49.288 ug/mlm

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG013125\  
 Data File : FG015283.D  
 Signal(s) : FID1A.ch  
 Acq On : 31 Jan 2025 16:17  
 Operator : YP\AJ  
 Sample : 50 PPM TRPH STD  
 Misc :  
 ALS Vial : 53 Sample Multiplier: 1

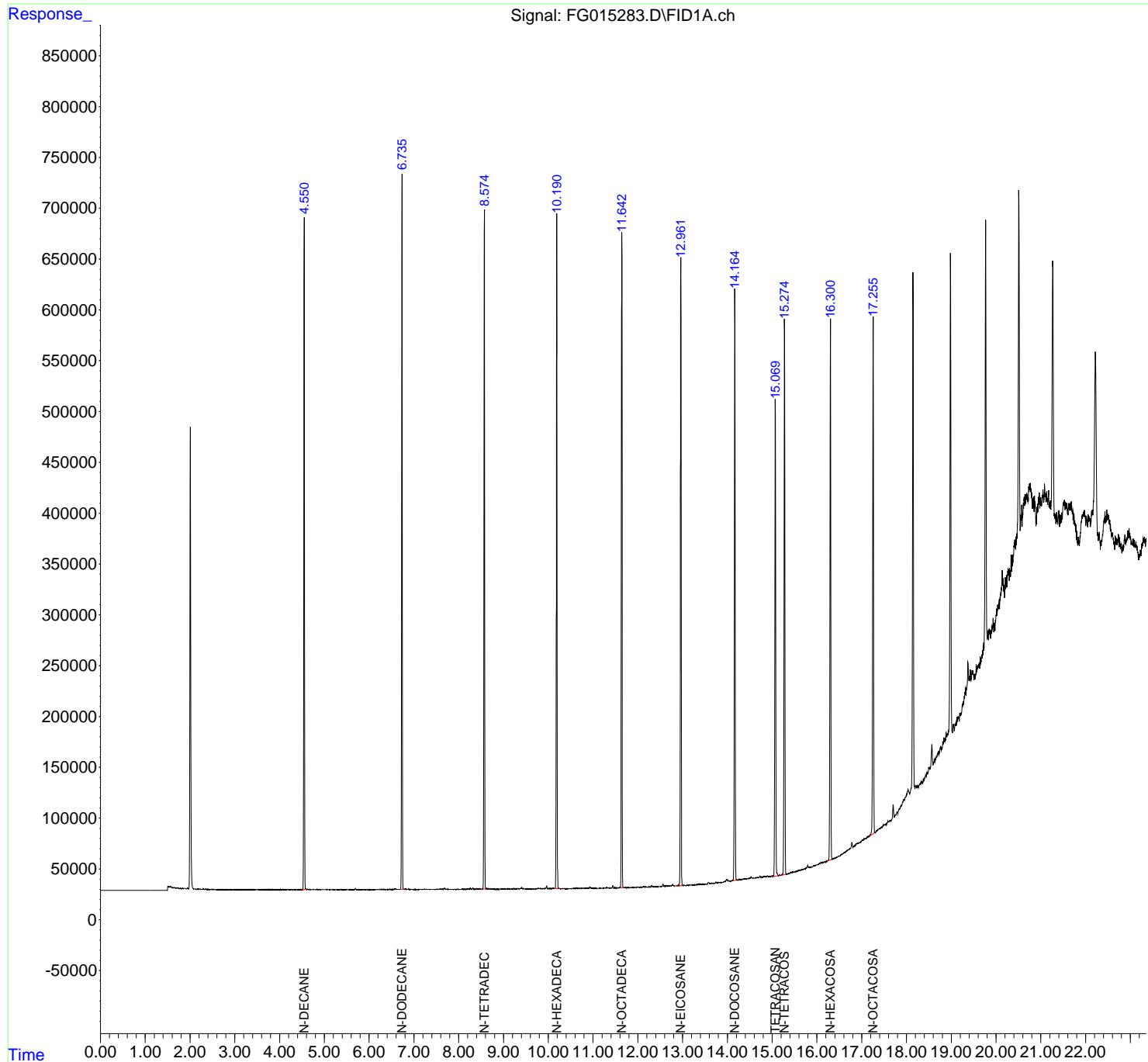
**Instrument :**  
**FID\_G**  
**ClientSampleId :**  
 50 PPM TRPH STD

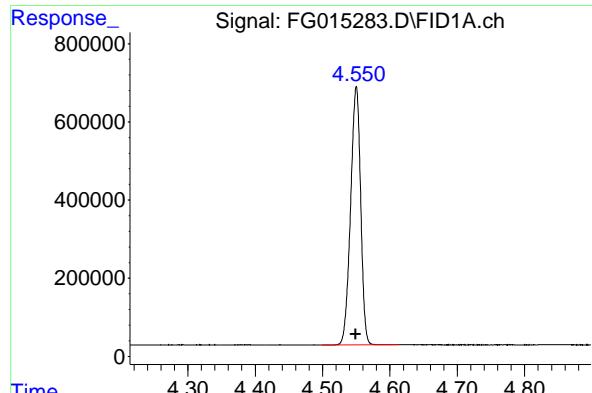
**Manual Integrations**  
**APPROVED**

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

Integration File: autoint1.e  
 Quant Time: Feb 01 01:16:27 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 : Rx1-1ms  
 Signal Info : 20mx0.18mmx0.18um



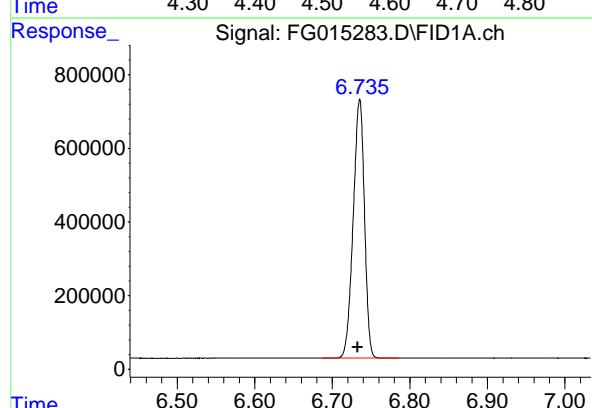


## #2 N-DECANE

R.T.: 4.550 min  
 Delta R.T.: 0.000 min  
 Response: 6845031 FID\_G  
 Conc: 52.99 ug/ml ClientSampleId :  
 50 PPM TRPH STD

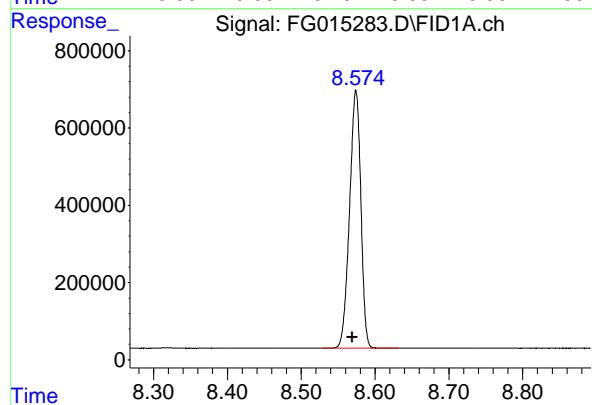
**Manual Integrations  
APPROVED**

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



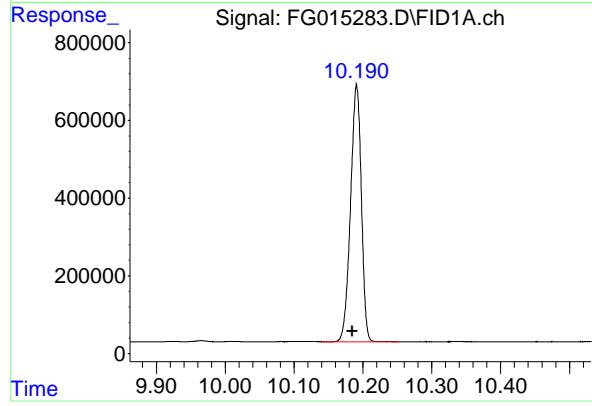
## #3 N-DODECANE

R.T.: 6.735 min  
 Delta R.T.: 0.003 min  
 Response: 7102993  
 Conc: 52.14 ug/ml



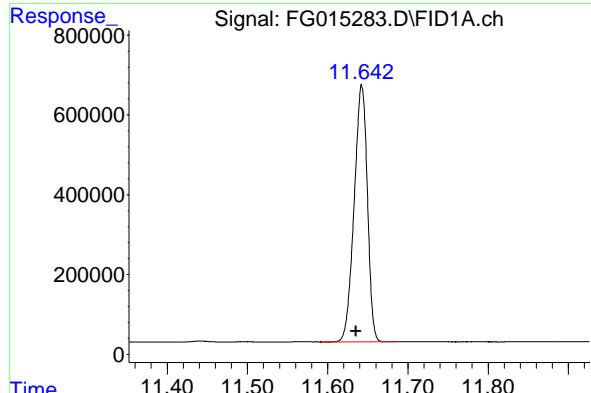
## #4 N-TETRADECANE

R.T.: 8.574 min  
 Delta R.T.: 0.005 min  
 Response: 7092897  
 Conc: 51.82 ug/ml



## #5 N-HEXADECANE

R.T.: 10.191 min  
 Delta R.T.: 0.007 min  
 Response: 7206608  
 Conc: 51.07 ug/ml

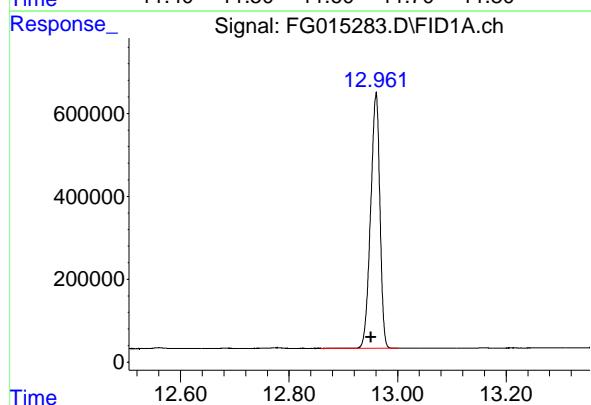


## #6 N-OCTADECANE

R.T.: 11.642 min  
 Delta R.T.: 0.007 min  
 Response: 7372867 FID\_G  
 Conc: 50.26 ug/ml ClientSampleId :  
 50 PPM TRPH STD

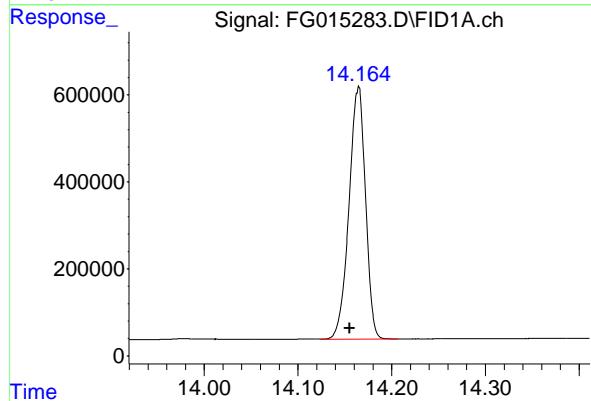
**Manual Integrations  
APPROVED**

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



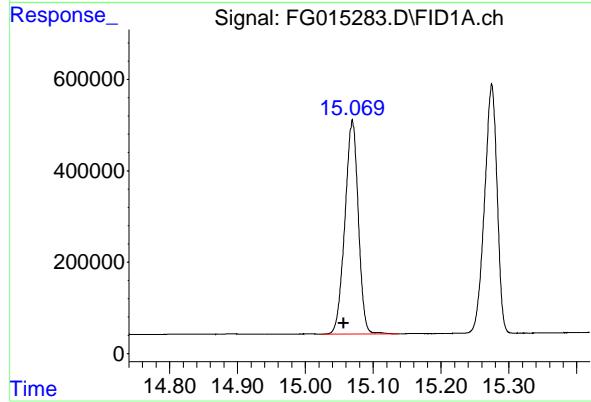
## #7 N-EICOSANE

R.T.: 12.960 min  
 Delta R.T.: 0.010 min  
 Response: 7307969  
 Conc: 50.27 ug/ml



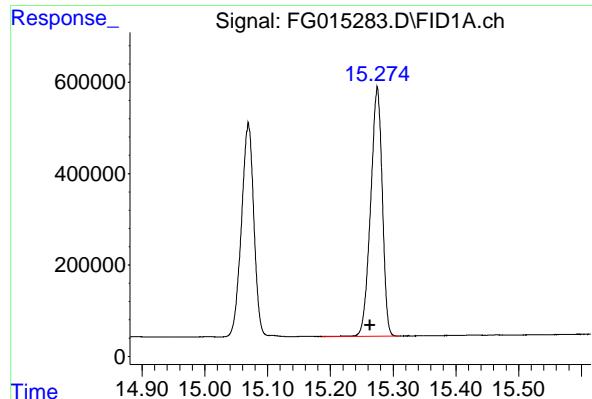
## #8 N-DOCOSANE

R.T.: 14.165 min  
 Delta R.T.: 0.010 min  
 Response: 7094223  
 Conc: 49.45 ug/ml



## #9 TETRACOSANE-d50 (SURROGATE)

R.T.: 15.069 min  
 Delta R.T.: 0.013 min  
 Response: 6434170  
 Conc: 50.16 ug/ml

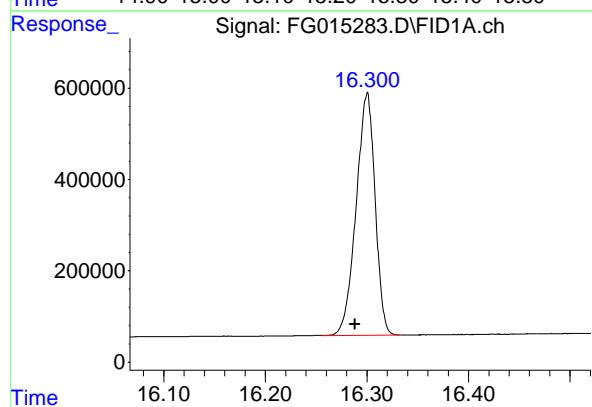


## #10 N-TETRACOSANE

R.T.: 15.275 min  
Delta R.T.: 0.012 min  
Instrument: FID\_G  
Response: 7024640 ClientSampleId :  
Conc: 49.18 ug/ml 50 PPM TRPH STD

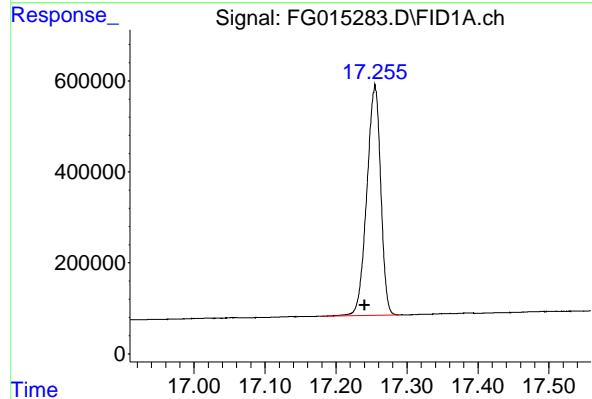
Manual Integrations  
APPROVED

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



## #11 N-HEXACOSANE

R.T.: 16.300 min  
Delta R.T.: 0.012 min  
Response: 6886344  
Conc: 48.89 ug/ml m



## #12 N-OCTACOSANE

R.T.: 17.255 min  
Delta R.T.: 0.014 min  
Response: 6901912  
Conc: 49.29 ug/ml m

rteres

**Instrument :**

FID\_G

**LabSampleId :**

50 PPM TRPH STD

**Area Percent Report**

**Manual Integrations APPROVED**

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG01312  
Data File : FG015283.D  
Signal (s) : FID1A.ch  
Acq On : 31 Jan 2025 16: 17  
Sample : 50 PPM TRPH STD  
Misc :  
ALS Vi al : 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. 550	4. 499	4. 613	BB	661355	6845031	92. 84%	8. 857%
2	6. 735	6. 687	6. 786	BB	702454	7102993	96. 34%	9. 191%
3	8. 574	8. 528	8. 633	BB	667384	7092897	96. 20%	9. 178%
4	10. 191	10. 141	10. 253	BB	661858	7206608	97. 74%	9. 325%
5	11. 642	11. 592	11. 688	BB	642047	7372867	100. 00%	9. 540%
6	12. 960	12. 859	13. 001	BV	618431	7307969	99. 12%	9. 456%
7	14. 165	14. 125	14. 207	PB	581610	7094223	96. 22%	9. 180%
8	15. 069	15. 023	15. 137	PV	468619	6434170	87. 27%	8. 326%
9	15. 275	15. 187	15. 309	BV	545427	7024640	95. 28%	9. 090%
10	16. 300	15. 826	16. 334	PV	530319	6878052	93. 29%	8. 900%
11	17. 255	17. 068	17. 290	VV	507994	6921377	93. 88%	8. 956%
				Sum of corrected areas:		77280827		

FG011325.M Sat Feb 01 02:07:44 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.: Q1232 SAS No.: Q1232 SDG No.: Q1232  
DataFile: FG015292.D Analyst Name: YP\AJ Analyst Date: 01-31-2025

Conc. (PPM)	Area Count	RF	Average RF	%D
500	70307909	140616	140262	0.252

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG013125\  
 Data File : FG015292.D  
 Signal(s) : FID1A.ch  
 Acq On : 31 Jan 2025 22:27  
 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 02/03/2025  
 Supervised By :Ankita Jodhani 02/03/2025

Integration File: autoint1.e  
 Quant Time: Feb 01 01:19:49 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 : Rx1-1ms  
 Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units
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**System Monitoring Compounds**

9) S TETRACOSANE-d50 (SURR...	15.062	6376799	49.712 ug/ml
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**Target Compounds**

2) N-DECANE	4.546	6725488	52.066 ug/ml
3) N-DODECANE	6.731	7008982	51.447 ug/ml
4) N-TETRADECANE	8.569	7040566	51.441 ug/ml
5) N-HEXADECANE	10.185	7188437	50.941 ug/ml
6) N-OCTADECANE	11.637	7373136	50.264 ug/ml
7) N-EICOSANE	12.953	7300725	50.216 ug/ml
8) N-DOCOSANE	14.158	7076466	49.326 ug/ml
10) N-TETRACOSANE	15.267	6987489	48.923 ug/ml
11) N-HEXACOSANE	16.293	6841485	48.576 ug/ml
12) N-OCTACOSANE	17.244	6765135	48.311 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG013125\  
 Data File : FG015292.D  
 Signal(s) : FID1A.ch  
 Acq On : 31 Jan 2025 22:27  
 Operator : YP\AJ  
 Sample : 50 PPM TRPH STD  
 Misc :  
 ALS Vial : 53 Sample Multiplier: 1

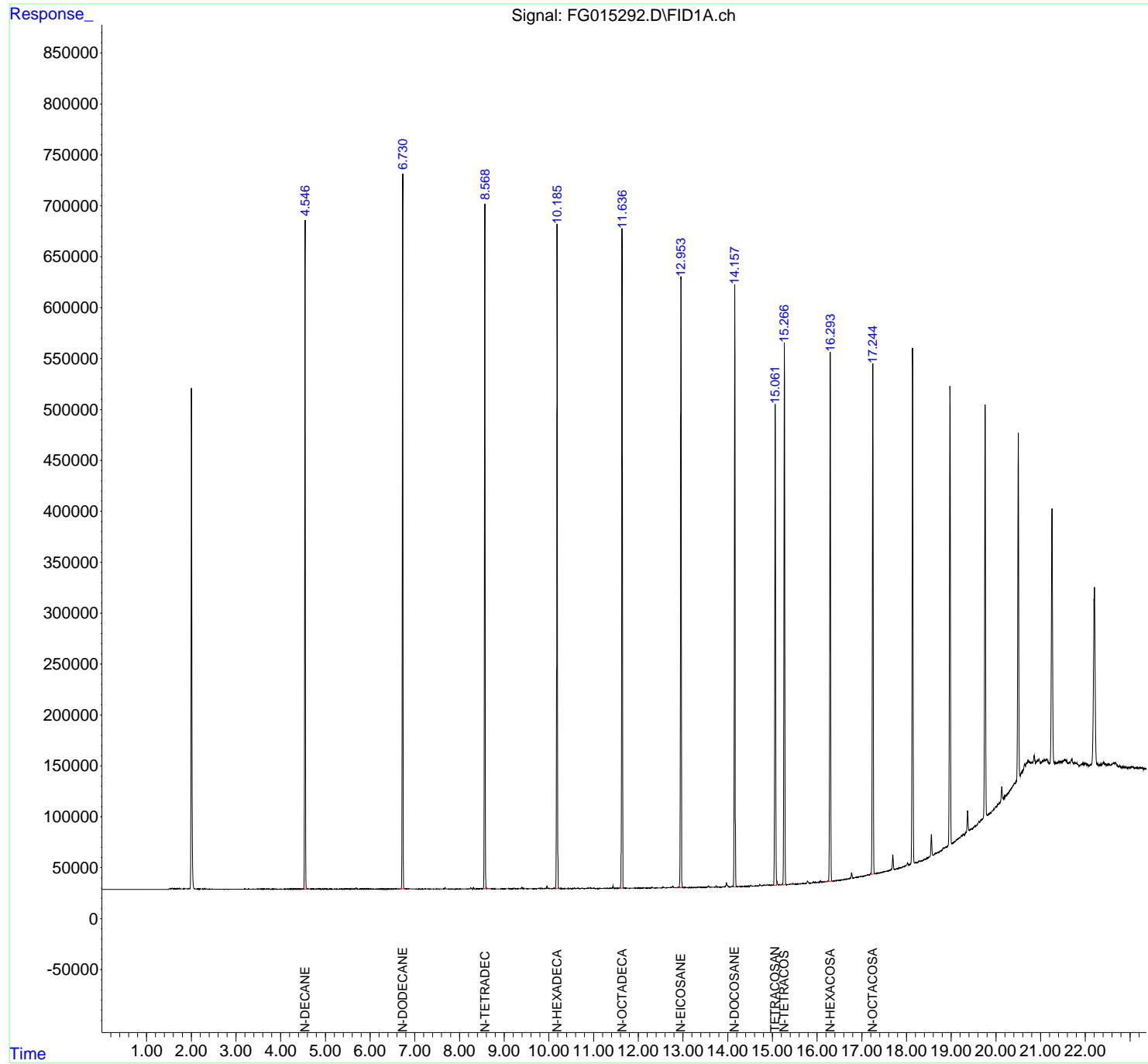
**Instrument :**  
**FID\_G**  
**ClientSampleId :**  
 50 PPM TRPH STD

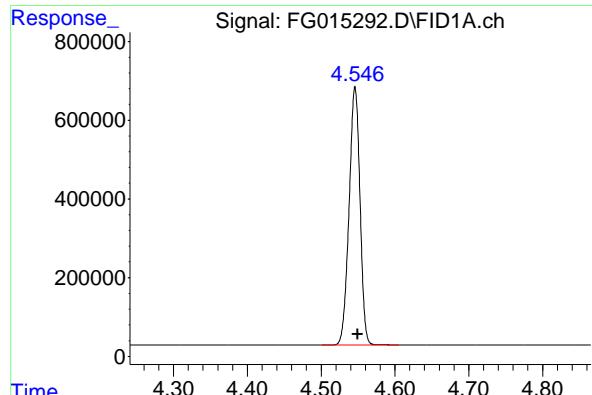
Integration File: autoint1.e  
 Quant Time: Feb 01 01:19:49 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG011325.M  
 Quant Title :  
 QLast Update : Fri Jan 24 12:51:39 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1uL  
 Signal Phase : Rx1-1ms  
 Signal Info : 20mx0.18mmx0.18um

**Manual Integrations**  
**APPROVED**

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



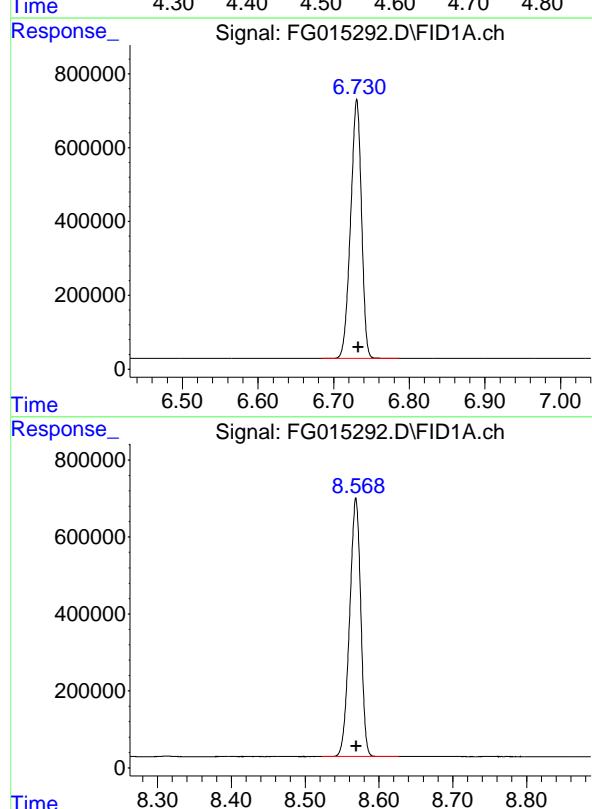


## #2 N-DECANE

R.T.: 4.546 min  
 Delta R.T.: -0.003 min  
 Response: 6725488 FID\_G  
 Conc: 52.07 ug/ml ClientSampleId :  
 50 PPM TRPH STD

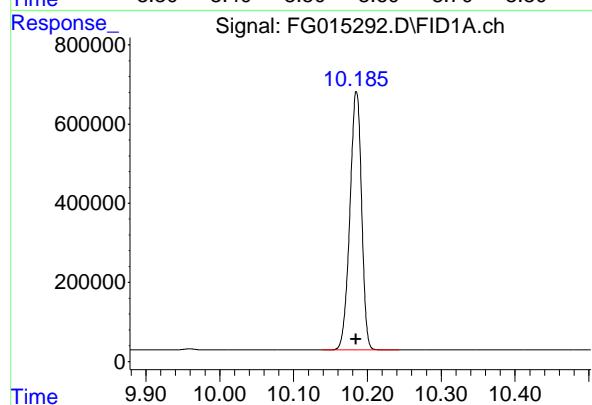
**Manual Integrations  
APPROVED**

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



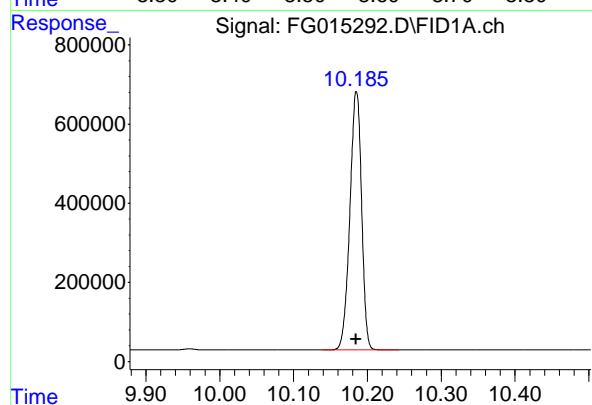
## #3 N-DODECANE

R.T.: 6.731 min  
 Delta R.T.: -0.002 min  
 Response: 7008982  
 Conc: 51.45 ug/ml



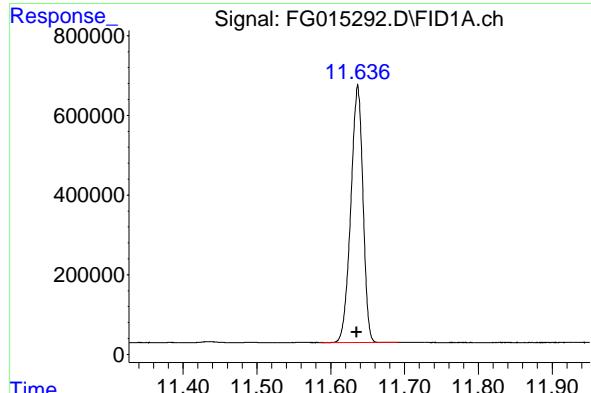
## #4 N-TETRADECANE

R.T.: 8.569 min  
 Delta R.T.: 0.000 min  
 Response: 7040566  
 Conc: 51.44 ug/ml



## #5 N-HEXADECANE

R.T.: 10.185 min  
 Delta R.T.: 0.000 min  
 Response: 7188437  
 Conc: 50.94 ug/ml

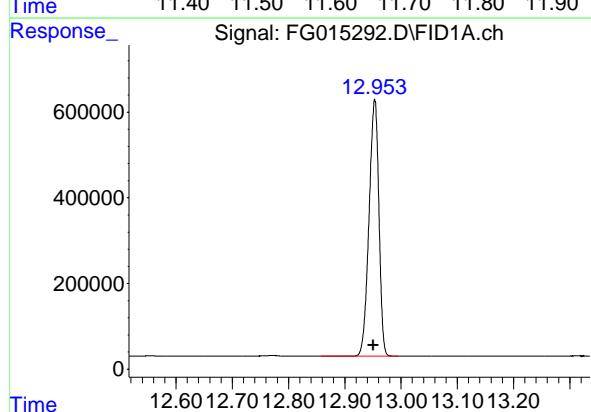


## #6 N-OCTADECANE

R.T.: 11.637 min  
 Delta R.T.: 0.002 min  
 Response: 7373136 FID\_G  
 Conc: 50.26 ug/ml ClientSampleId :  
 50 PPM TRPH STD

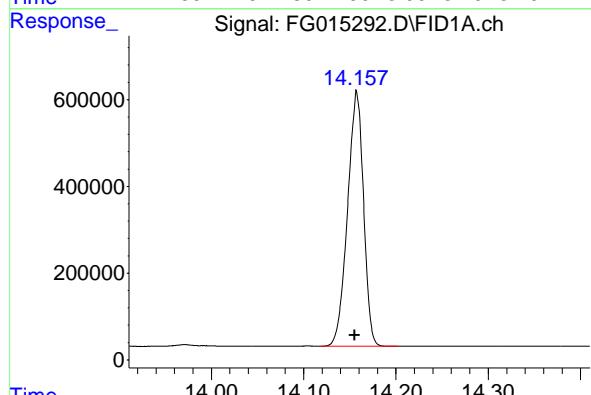
### Manual Integrations APPROVED

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



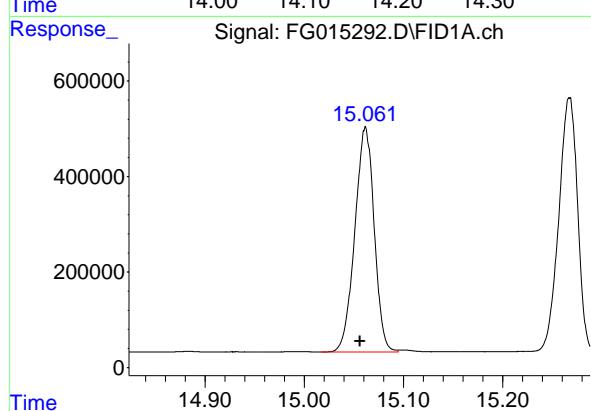
## #7 N-EICOSANE

R.T.: 12.953 min  
 Delta R.T.: 0.002 min  
 Response: 7300725  
 Conc: 50.22 ug/ml



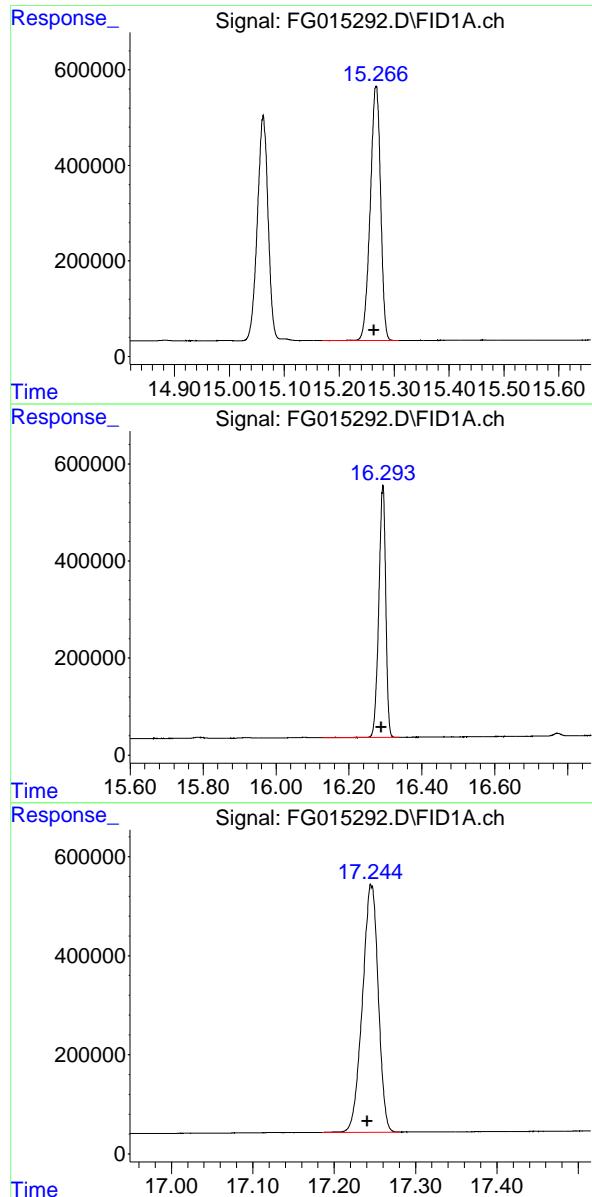
## #8 N-DOCOSANE

R.T.: 14.158 min  
 Delta R.T.: 0.002 min  
 Response: 7076466  
 Conc: 49.33 ug/ml



## #9 TETRACOSANE-d50 (SURROGATE)

R.T.: 15.062 min  
 Delta R.T.: 0.005 min  
 Response: 6376799  
 Conc: 49.71 ug/ml



### #10 N-TETRACOSANE

R.T.: 15.267 min  
 Delta R.T.: 0.004 min  
 Response: 6987489 FID\_G  
 Conc: 48.92 ug/ml ClientSampleId :  
 50 PPM TRPH STD

#### Manual Integrations APPROVED

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

### #11 N-HEXACOSANE

R.T.: 16.293 min  
 Delta R.T.: 0.005 min  
 Response: 6841485  
 Conc: 48.58 ug/ml

### #12 N-OCTACOSANE

R.T.: 17.244 min  
 Delta R.T.: 0.004 min  
 Response: 6765135  
 Conc: 48.31 ug/ml

rteres

**Instrument :**

FID\_G

**LabSampleId :**

50 PPM TRPH STD

**Area Percent Report**

**Manual Integrations APPROVED**

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG01312  
Data File : FG015292.D  
Signal (s) : FID1A.ch  
Acq On : 31 Jan 2025 22: 27  
Sample : 50 PPM TRPH STD  
Misc :  
ALS Vi al : 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. 546	4. 501	4. 605	BB	656026	6725488	91. 22%	8. 771%
2	6. 731	6. 684	6. 786	BB	702019	7008982	95. 06%	9. 141%
3	8. 569	8. 523	8. 627	BB	672328	7040566	95. 49%	9. 182%
4	10. 185	10. 139	10. 243	BB	652612	7188437	97. 49%	9. 375%
5	11. 637	11. 587	11. 691	BB	647701	7373136	100. 00%	9. 615%
6	12. 953	12. 858	12. 995	BV	597327	7300725	99. 02%	9. 521%
7	14. 158	14. 119	14. 202	VB	586761	7076466	95. 98%	9. 229%
8	15. 062	15. 017	15. 095	BV	472670	6376799	86. 49%	8. 316%
9	15. 267	15. 169	15. 309	BB	531658	6987489	94. 77%	9. 112%
10	16. 293	16. 126	16. 337	BB	518685	6841485	92. 79%	8. 922%
11	17. 246	16. 815	17. 282	BB	497105	6760929	91. 70%	8. 817%
				Sum of corrected areas:		76680501		

FG011325.M Sat Feb 01 02:10:07 2025

### Analytical Sequence

Client:	RU2 Engineering, LLC	SDG No.:	Q1232
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		15.2554			#
EPA SAMPLE NO.	LAB SAMPLE ID	DATE AND TIME ANALYZED	DATAFILE	RT	#
PIBLK01	L.BLK01	31 Jan 2025 09:56	FE052167.D	15.274	
50 PPM TRPH STD	50 PPM TRPH STD	31 Jan 2025 10:26	FE052168.D	15.275	
PB166415BL	PB166415BL	31 Jan 2025 12:08	FE052171.D	15.271	
PB166415BS	PB166415BS	31 Jan 2025 12:38	FE052172.D	15.270	
PIBLK02	L.BLK02	31 Jan 2025 16:09	FE052179.D	15.300	
50 PPM TRPH STD	50 PPM TRPH STD	31 Jan 2025 16:40	FE052180.D	15.300	
JPP-5.3-013025MS	Q1241-05MS	31 Jan 2025 17:10	FE052181.D	15.243	
JPP-5.3-013025MSD	Q1241-05MSD	31 Jan 2025 17:40	FE052182.D	15.248	
PIBLK03	L.BLK03	31 Jan 2025 21:12	FE052189.D	15.299	
50 PPM TRPH STD	50 PPM TRPH STD	31 Jan 2025 22:12	FE052190.D	15.300	
PIBLK04	L.BLK04	31 Jan 2025 15:48	FG015282.D	15.066	
50 PPM TRPH STD	50 PPM TRPH STD	31 Jan 2025 16:17	FG015283.D	15.069	
JPP-46.2-012925	Q1232-01	31 Jan 2025 18:11	FG015284.D	15.013	
JPP-46.1-012925	Q1232-05	31 Jan 2025 18:39	FG015285.D	15.010	
JPP-42.1-012925	Q1232-09	31 Jan 2025 19:08	FG015286.D	15.010	
JPP-42.2-012925	Q1232-13	31 Jan 2025 19:36	FG015287.D	15.010	
JPP-51.1-012925	Q1232-17	31 Jan 2025 20:05	FG015288.D	15.007	
PIBLK05	L.BLK05	31 Jan 2025 21:30	FG015291.D	15.058	
50 PPM TRPH STD	50 PPM TRPH STD	31 Jan 2025 22:27	FG015292.D	15.062	

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

<u>QC Limits</u> (± 0.10 minutes)	<u>Lower Limit</u> 14.9514	<u>Upper Limits</u> 15.1514
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# QC SAMPLE

# DATA

## Report of Analysis

Client:	RU2 Engineering, LLC			Date Collected:	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR			Date Received:	
Client Sample ID:	PB166415BL			SDG No.:	Q1232
Lab Sample ID:	PB166415BL			Matrix:	SOIL
Analytical Method:	8015D DRO			% Solid:	100 Decanted:
Sample Wt/Vol:	30.02	Units:	g	Final Vol:	1 mL
Soil Aliquot Vol:	uL			Test:	Diesel Range Organics
Extraction Type:				Injection Volume :	
GPC Factor :	PH :				
Prep Method :	SW3541				

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

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

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

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

Instrument :  
FID\_E  
ClientSampleId :  
PB166415BL

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

Volume Inj. : 1uL  
Signal Phase : Rx1-1ms  
Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

9) S TETRACOSANE-d50 (SURR...	15.271	1729476	17.364 ug/ml
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Target Compounds

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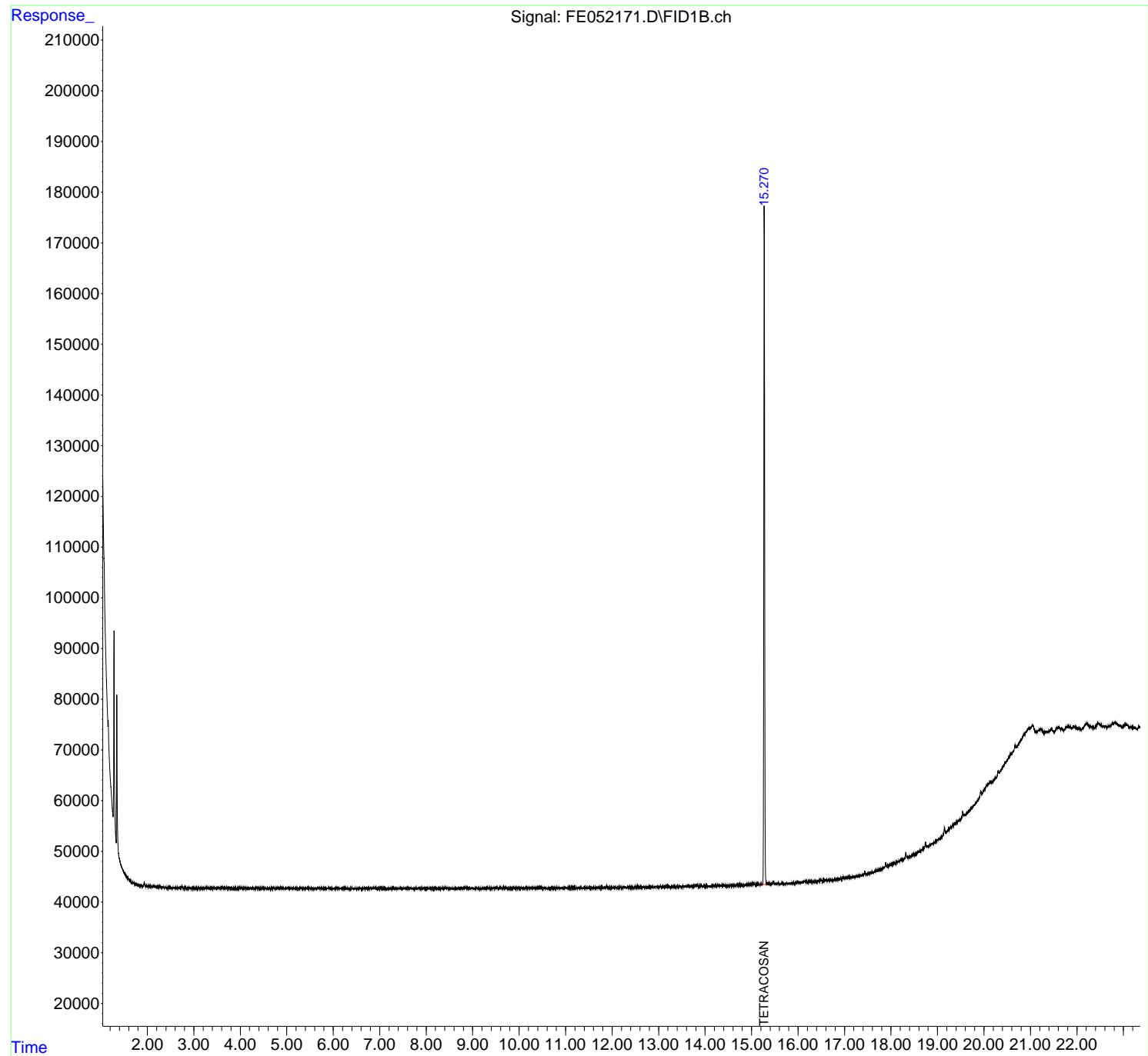
(f)=RT Delta > 1/2 Window (m)=manual int.

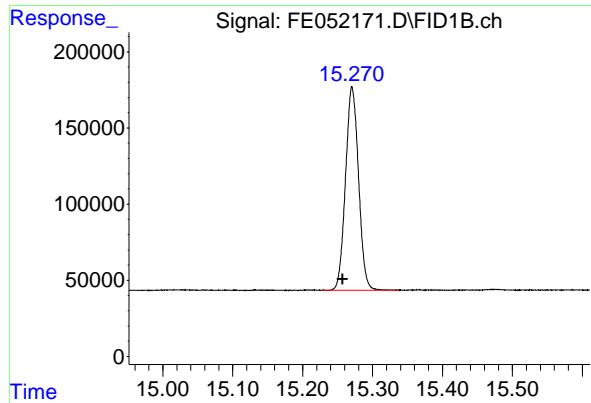
Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_E\Data\FE013125\  
Data File : FE052171.D  
Signal(s) : FID1B.ch  
Acq On : 31 Jan 2025 12:08  
Operator : YP\AJ  
Sample : PB166415BL  
Misc :  
ALS Vial : 12 Sample Multiplier: 1

Instrument :  
FID\_E  
ClientSampleId :  
PB166415BL

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

Volume Inj. : 1uL  
Signal Phase : Rx1-1ms  
Signal Info : 20mx0.18mmx0.18um





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 15.271 min  
Delta R.T.: 0.014 min  
Instrument: FID\_E  
Response: 1729476  
Conc: 17.36 ug/ml  
ClientSampleId: PB166415BL

## rteres

## Area Percent Report

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

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID\_E\methods\FE012325.M  
Title :

Signal : FID1B.ch

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

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

## Report of Analysis

Client:	RU2 Engineering, LLC			Date Collected:	01/31/25	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR			Date Received:	01/31/25	
Client Sample ID:	PIBLK-FE052167.D			SDG No.:	Q1232	
Lab Sample ID:	I.BLK-FE052167.D			Matrix:	Water	
Analytical Method:	8015D DRO			% Solid:	0	Decanted:
Sample Wt/Vol:	1000	Units:	mL	Final Vol:	1	mL
Soil Aliquot Vol:	uL			Test:	Diesel Range Organics	
Extraction Type:				Injection Volume :		
GPC Factor :	PH :					
Prep Method :	SW3510					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FE052167.D	1		01/31/25	FE013125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
DRO	DRO	50.0	U	10.0	50.0	ug/L
<b>SURROGATES</b>						
16416-32-3	Tetracosane-d50	18.1		29 - 130	90%	SPK: 20

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

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

**Instrument :**  
 FID\_E  
**ClientSampleId :**  
 I.BLK

**Manual Integrations**  
**APPROVED**

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

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

Volume Inj. : 1uL  
 Signal Phase : Rx1-1ms  
 Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

9) S TETRACOSANE-d50 (SURR...	15.273	1801068	18.083 ug/mlm
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Target Compounds

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

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

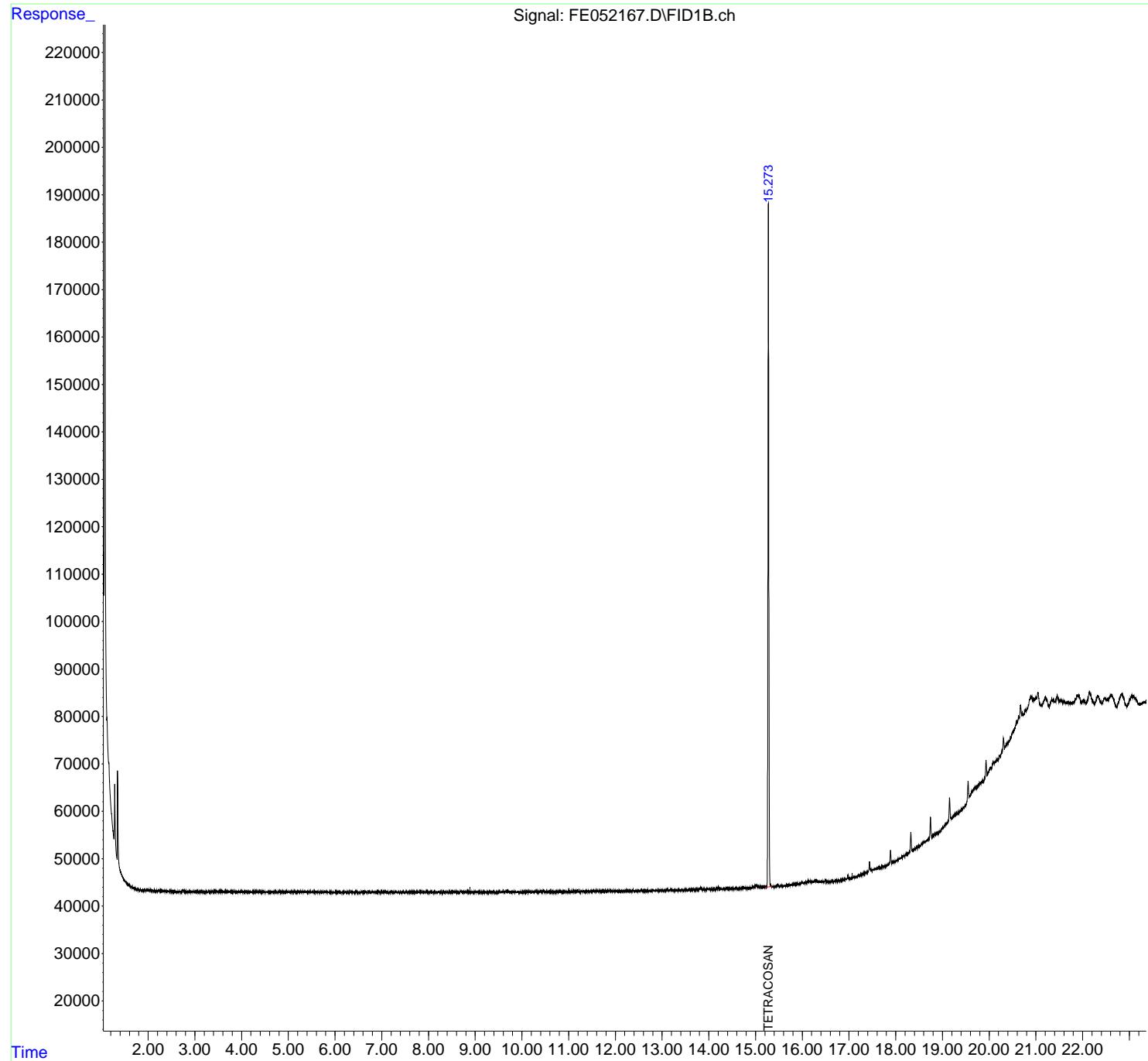
Instrument :  
 FID\_E  
 ClientSampleId :  
 I.BLK

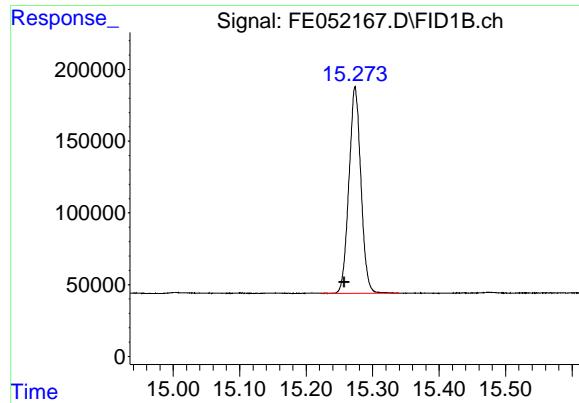
**Manual Integrations**  
**APPROVED**

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

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

Volume Inj. : 1uL  
 Signal Phase : Rx1-1ms  
 Signal Info : 20mx0.18mmx0.18um





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 15.273 min  
Delta R.T.: 0.017 min  
Response: 1801068 FID\_E  
Conc: 18.08 ug/ml ClientSampleId : I.BLK

Manual Integrations  
APPROVED

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

rteres

Instrument :

FID\_E

LabSampleId :

I.BLK

Area Percent Report

Manual Integrations APPROVED

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

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

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID\_E\methods\FE012325.M  
Title :

Signal : FID1B.ch

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

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

## Report of Analysis

Client:	RU2 Engineering, LLC			Date Collected:	01/31/25	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR			Date Received:	01/31/25	
Client Sample ID:	PIBLK-FE052179.D			SDG No.:	Q1232	
Lab Sample ID:	I.BLK-FE052179.D			Matrix:	Water	
Analytical Method:	8015D DRO			% Solid:	0	Decanted:
Sample Wt/Vol:	1000	Units:	mL	Final Vol:	1	mL
Soil Aliquot Vol:	uL			Test:	Diesel Range Organics	
Extraction Type:				Injection Volume :		
GPC Factor :	PH :					
Prep Method :	SW3510					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FE052179.D	1		01/31/25	FE013125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
DRO	DRO	50.0	U	10.0	50.0	ug/L
<b>SURROGATES</b>						
16416-32-3	Tetracosane-d50	16.3		29 - 130	82%	SPK: 20

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

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

Instrument :  
FID\_E  
ClientSampleId :  
I.BLK

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

Volume Inj. : 1uL  
Signal Phase : Rx1-1ms  
Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

9) S TETRACOSANE-d50 (SURR...	15.300	1626036	16.326 ug/ml
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Target Compounds

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(f)=RT Delta > 1/2 Window

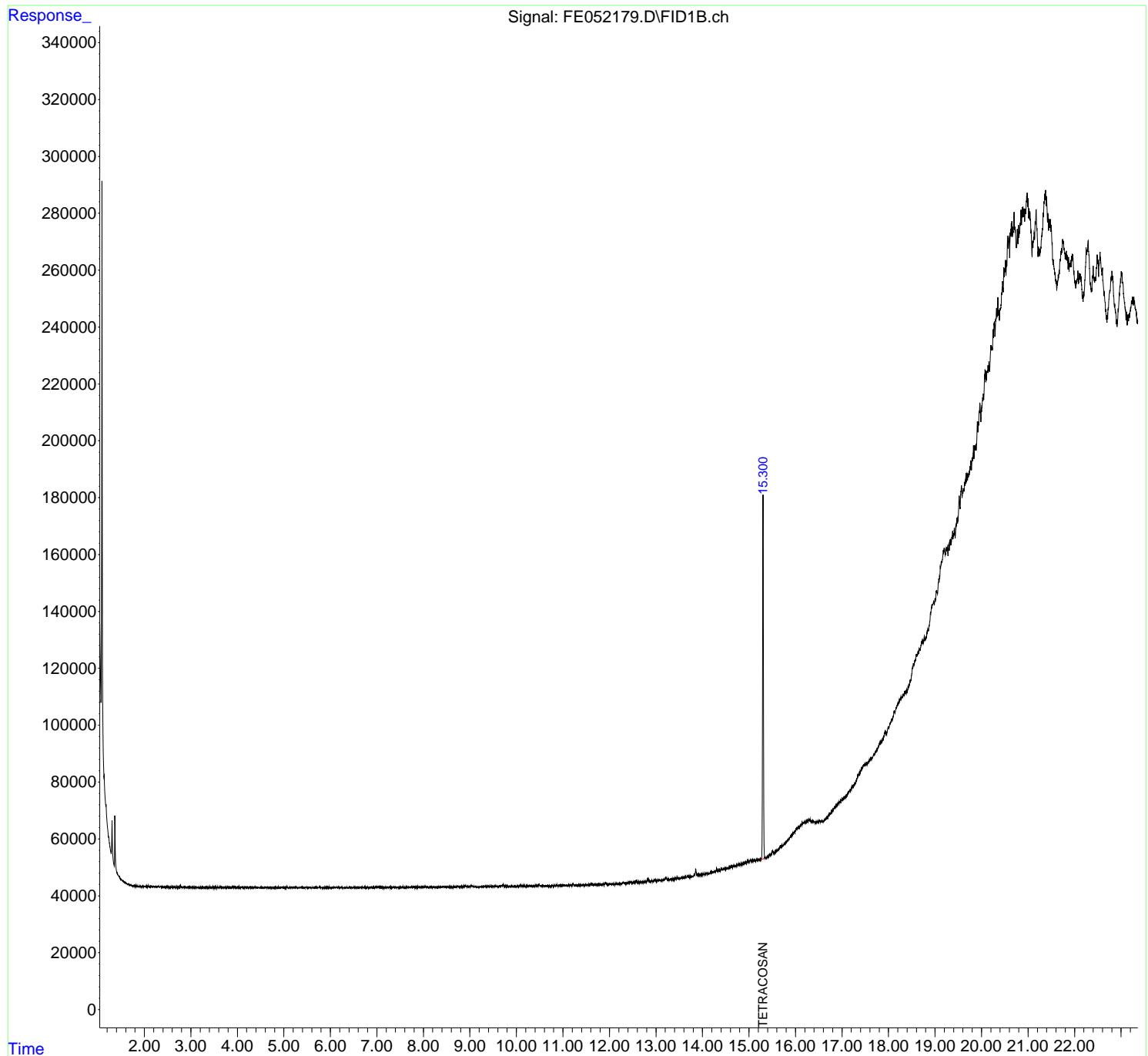
(m)=manual int.

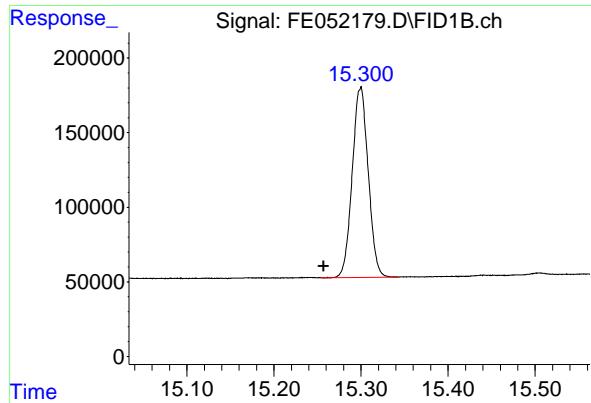
Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_E\Data\FE013125\  
Data File : FE052179.D  
Signal(s) : FID1B.ch  
Acq On : 31 Jan 2025 16:09  
Operator : YP\AJ  
Sample : I.BLK  
Misc :  
ALS Vial : 98 Sample Multiplier: 1

Instrument :  
FID\_E  
ClientSampleId :  
I.BLK

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

Volume Inj. : 1uL  
Signal Phase : Rx1-1ms  
Signal Info : 20mx0.18mmx0.18um





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 15.300 min  
Delta R.T.: 0.043 min  
Instrument: FID\_E  
Response: 1626036  
Conc: 16.33 ug/ml  
ClientSampleId: I.BLK

## rteres

## Area Percent Report

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

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID\_E\methods\FE012325.M  
Title :

Signal : FID1B.ch

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

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

## Report of Analysis

Client:	RU2 Engineering, LLC			Date Collected:	01/31/25			
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR			Date Received:	01/31/25			
Client Sample ID:	PIBLK-FE052189.D			SDG No.:	Q1232			
Lab Sample ID:	I.BLK-FE052189.D			Matrix:	Water			
Analytical Method:	8015D DRO			% Solid:	0	Decanted:		
Sample Wt/Vol:	1000	Units:	mL	Final Vol:	1	mL		
Soil Aliquot Vol:	uL			Test:	Diesel Range Organics			
Extraction Type:				Injection Volume :				
GPC Factor :	PH :							
Prep Method :	SW3510							

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
FE052189.D	1		01/31/25	FE013125

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

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

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

Instrument :  
FID\_E  
ClientSampleId :  
I.BLK

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

Volume Inj. : 1uL  
Signal Phase : Rx1-1ms  
Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

9) S TETRACOSANE-d50 (SURR...	15.299	1739092	17.461 ug/ml
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Target Compounds

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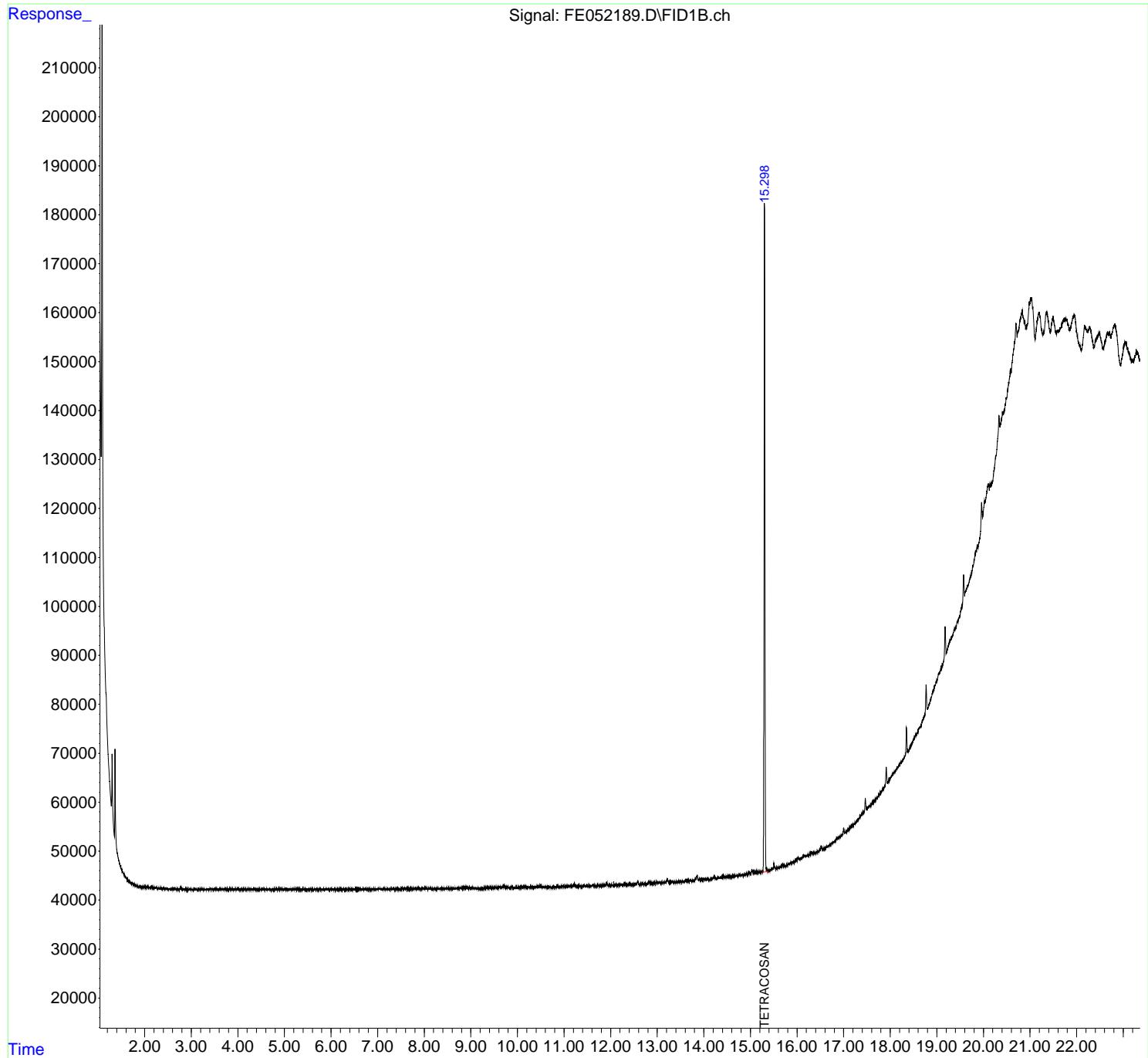
(f)=RT Delta > 1/2 Window (m)=manual int.

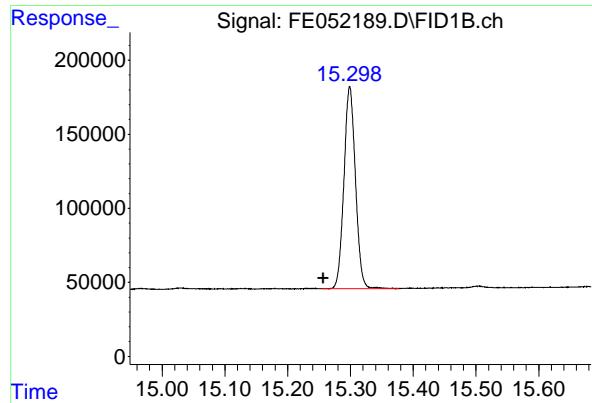
Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_E\Data\FE013125\  
Data File : FE052189.D  
Signal(s) : FID1B.ch  
Acq On : 31 Jan 2025 21:12  
Operator : YP\AJ  
Sample : I.BLK  
Misc :  
ALS Vial : 96 Sample Multiplier: 1

Instrument :  
FID\_E  
ClientSampleId :  
I.BLK

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

Volume Inj. : 1uL  
Signal Phase : Rx1-1ms  
Signal Info : 20mx0.18mmx0.18um





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 15.299 min  
Delta R.T.: 0.042 min  
Instrument: FID\_E  
Response: 1739092 ClientSampleId :  
Conc: 17.46 ug/ml I.BLK

## rteres

## Area Percent Report

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

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID\_E\methods\FE012325.M  
Title :

Signal : FID1B.ch

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

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

## Report of Analysis

Client:	RU2 Engineering, LLC			Date Collected:	01/31/25			
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR			Date Received:	01/31/25			
Client Sample ID:	PIBLK-FG015282.D			SDG No.:	Q1232			
Lab Sample ID:	I.BLK-FG015282.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
FG015282.D	1		01/31/25	FG013125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
DRO	DRO	50.0	U	10.0	50.0	ug/L
<b>SURROGATES</b>						
16416-32-3	Tetracosane-d50	16.6		29 - 130	83%	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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG013125\  
Data File : FG015282.D  
Signal(s) : FID1A.ch  
Acq On : 31 Jan 2025 15:48  
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: Feb 01 01:16:07 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 : Rx1-1ms  
Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

9) S TETRACOSANE-d50 (SURR...	15.066	2129580	16.602 ug/ml
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Target Compounds

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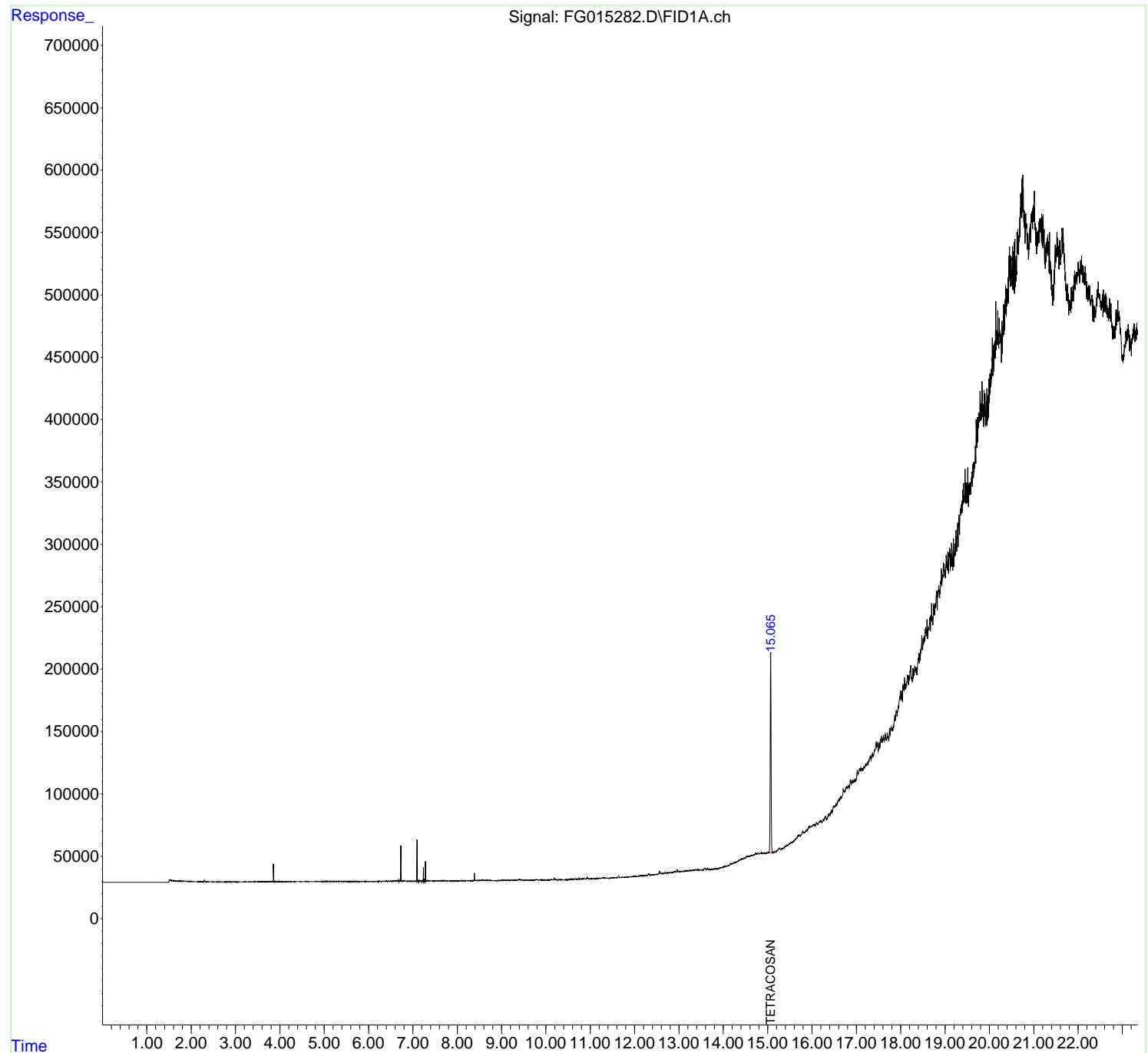
(f)=RT Delta > 1/2 Window (m)=manual int.

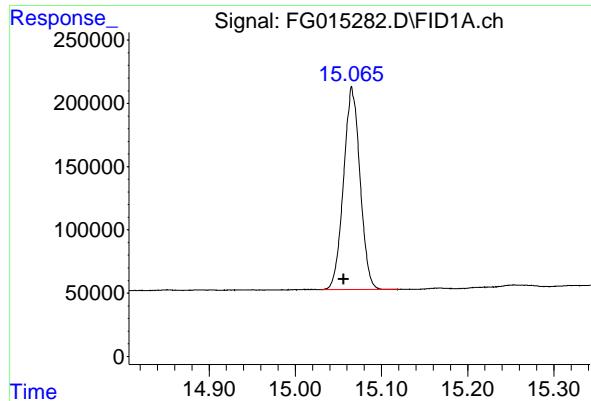
Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG013125\  
Data File : FG015282.D  
Signal(s) : FID1A.ch  
Acq On : 31 Jan 2025 15:48  
Operator : YP\AJ  
Sample : I.BLK  
Misc :  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
FID\_G  
ClientSampleId :  
I.BLK

Integration File: autoint1.e  
Quant Time: Feb 01 01:16:07 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 : Rx1-1ms  
Signal Info : 20mx0.18mmx0.18um





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 15.066 min  
Delta R.T.: 0.010 min  
Instrument: FID\_G  
Response: 2129580  
Conc: 16.60 ug/ml  
ClientSampleId: I.BLK

## rteres

## Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG013125\  
Data File : FG015282.D  
Signal (s) : FID1A.ch  
Acq On : 31 Jan 2025 15:48  
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	15.066	15.030	15.119	VB	159391	2129580	100.00%	100.000%
Sum of corrected areas:							2129580	

FG011325.M Sat Feb 01 02:05:34 2025

## Report of Analysis

Client:	RU2 Engineering, LLC			Date Collected:	01/31/25			
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR			Date Received:	01/31/25			
Client Sample ID:	PIBLK-FG015291.D			SDG No.:	Q1232			
Lab Sample ID:	I.BLK-FG015291.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
FG015291.D	1		01/31/25	FG013125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
DRO	DRO	50.0	U	10.0	50.0	ug/L
<b>SURROGATES</b>						
16416-32-3	Tetracosane-d50	15.9		29 - 130	80%	SPK: 20

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG013125\  
Data File : FG015291.D  
Signal(s) : FID1A.ch  
Acq On : 31 Jan 2025 21:30  
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: Feb 01 01:57:10 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 : Rx1-1ms  
Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

9) S TETRACOSANE-d50 (SURR...	15.058	2039420	15.899 ug/ml
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Target Compounds

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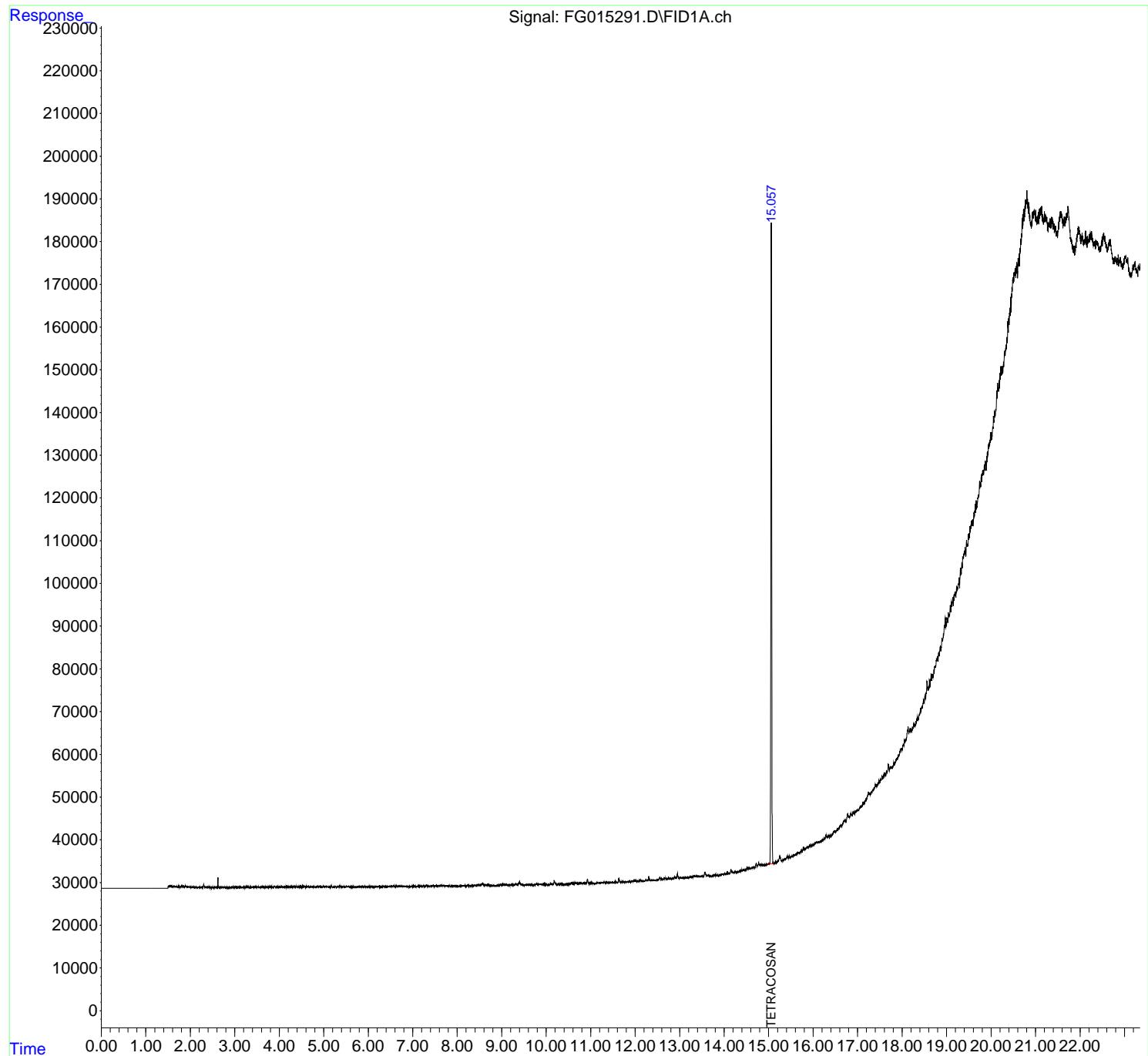
(f)=RT Delta > 1/2 Window (m)=manual int.

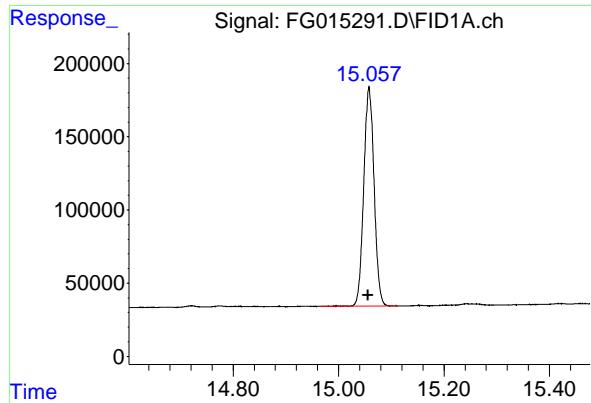
Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG013125\  
Data File : FG015291.D  
Signal(s) : FID1A.ch  
Acq On : 31 Jan 2025 21:30  
Operator : YP\AJ  
Sample : I.BLK  
Misc :  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
FID\_G  
ClientSampleId :  
I.BLK

Integration File: autoint1.e  
Quant Time: Feb 01 01:57:10 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 : Rx1-1ms  
Signal Info : 20mx0.18mmx0.18um





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 15.058 min  
Delta R.T.: 0.002 min  
Instrument: FID\_G  
Response: 2039420  
Conc: 15.90 ug/ml  
ClientSampleId: I.BLK

## rteres

## Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG013125\  
Data File : FG015291.D  
Signal (s) : FID1A.ch  
Acq On : 31 Jan 2025 21:30  
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	15.058	14.967	15.113	BB	149689	2039420	100.00%	100.000%
Sum of corrected areas:							2039420	

FG011325.M Sat Feb 01 02:08:18 2025

## Report of Analysis

Client:	RU2 Engineering, LLC			Date Collected:	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR			Date Received:	
Client Sample ID:	PB166415BS			SDG No.:	Q1232
Lab Sample ID:	PB166415BS			Matrix:	SOIL
Analytical Method:	8015D DRO			% Solid:	100 Decanted:
Sample Wt/Vol:	30.03	Units:	g	Final Vol:	1 mL
Soil Aliquot Vol:	uL			Test:	Diesel Range Organics
Extraction Type:				Injection Volume :	
GPC Factor :	PH :				
Prep Method :	SW3541				

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

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
<b>TARGETS</b>						
DRO	DRO	6350		185		1670 ug/kg
<b>SURROGATES</b>						
16416-32-3	Tetracosane-d50	18.8		37 - 130		94% SPK: 20

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

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

**Instrument :**  
 FID\_E  
**ClientSampleId :**  
 PB166415BS

**Manual Integrations**  
**APPROVED**

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

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

Volume Inj. : 1uL  
 Signal Phase : Rx1-1ms  
 Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units
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**System Monitoring Compounds**

9) S TETRACOSANE-d50 (SURR...	15.269	1871130	18.787 ug/mlm
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**Target Compounds**

2) N-DECANE	4.930	1667496	18.223 ug/ml
3) N-DODECANE	7.056	1831391	18.329 ug/ml
4) N-TETRADECANE	8.860	1960262	19.266 ug/ml
5) N-HEXADECANE	10.452	2054144	19.277 ug/ml
6) N-OCTADECANE	11.884	2140266	19.089 ug/mlm
7) N-EICOSANE	13.186	2185174	19.619 ug/ml
8) N-DOCOSANE	14.376	2128002	19.166 ug/ml
10) N-TETRACOSANE	15.474	2117307	19.142 ug/ml
11) N-HEXACOSANE	16.490	2103127	19.293 ug/ml
12) N-OCTACOSANE	17.436	2070572	19.183 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

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

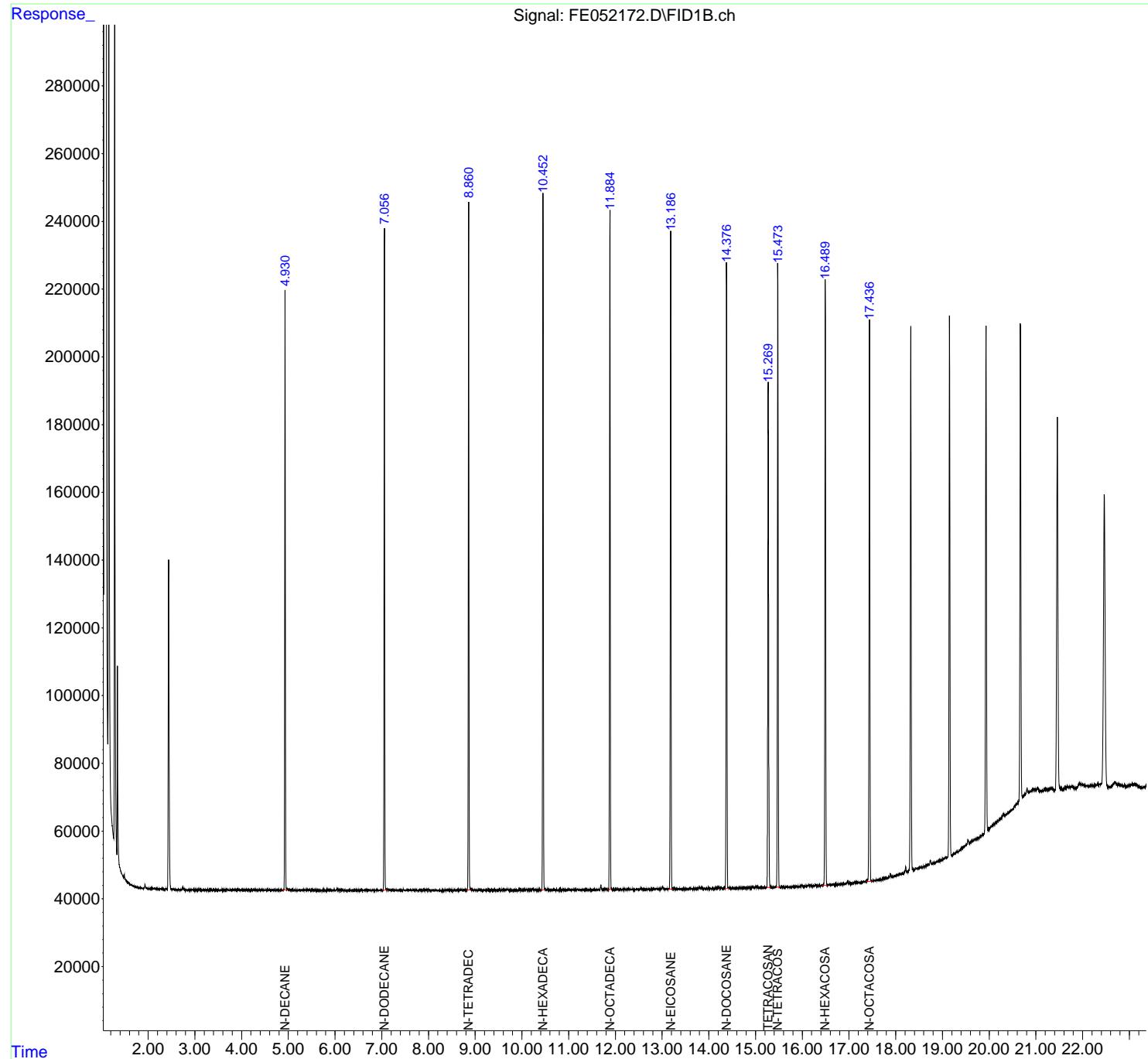
**Instrument :**  
**FID\_E**  
**ClientSampleId :**  
**PB166415BS**

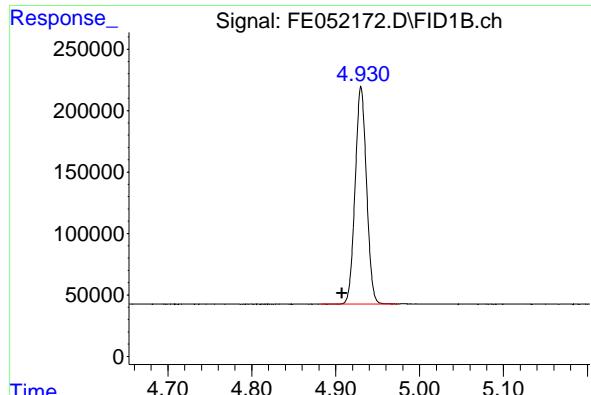
**Manual Integrations**  
**APPROVED**

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

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

Volume Inj. : 1uL  
 Signal Phase : Rx1-1ms  
 Signal Info : 20mx0.18mmx0.18um



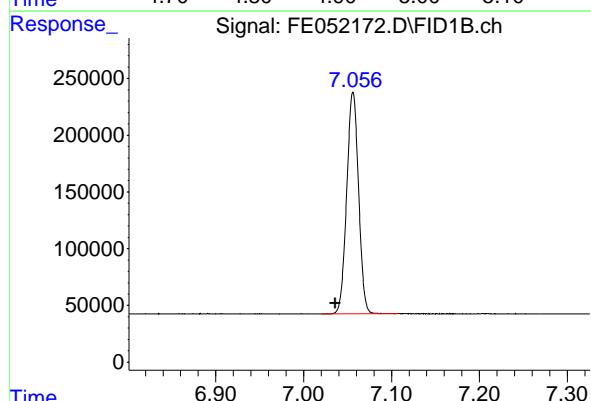


#2 N-DECANE

R.T.: 4.930 min  
 Delta R.T.: 0.023 min  
 Response: 1667496 FID\_E  
 Conc: 18.22 ug/ml ClientSampleId : PB166415BS

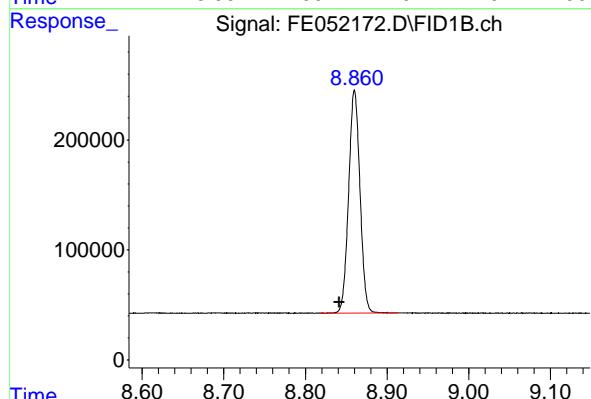
**Manual Integrations  
APPROVED**

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



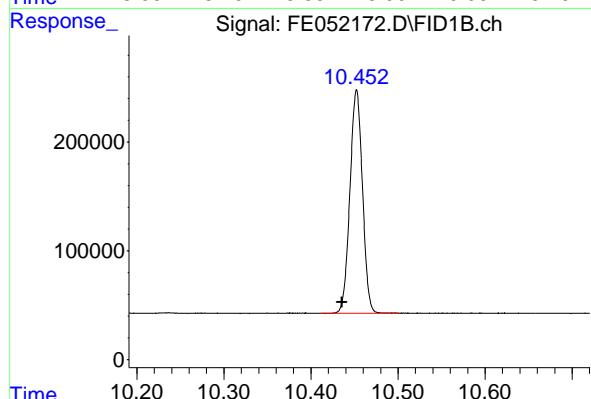
#3 N-DODECANE

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



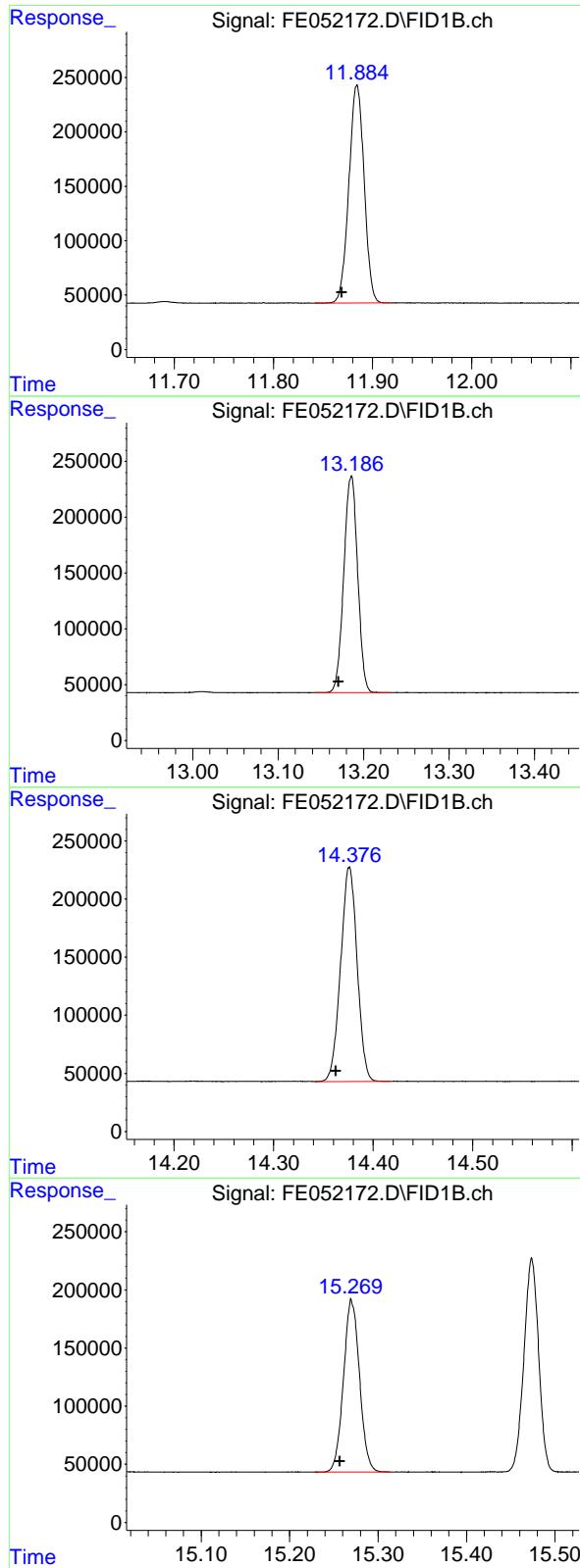
#4 N-TETRADECANE

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



#5 N-HEXADECANE

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



## #6 N-OCTADECANE

R.T.: 11.884 min  
 Delta R.T.: 0.015 min  
 Response: 2140266 FID\_E  
 Conc: 19.09 ug/ml ClientSampleId : PB166415BS

### Manual Integrations APPROVED

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

## #7 N-EICOSANE

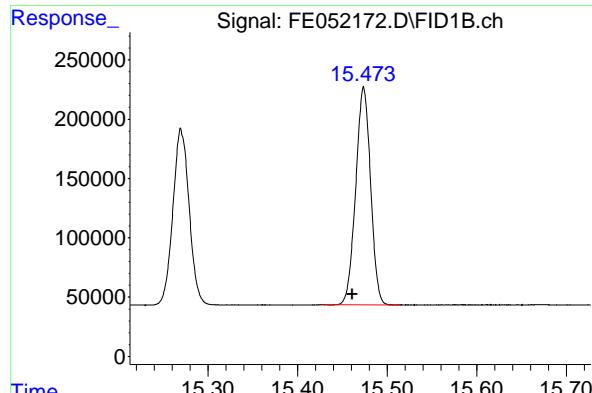
R.T.: 13.186 min  
 Delta R.T.: 0.015 min  
 Response: 2185174  
 Conc: 19.62 ug/ml

## #8 N-DOCOSANE

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

## #9 TETRACOSANE-d50 (SURROGATE)

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

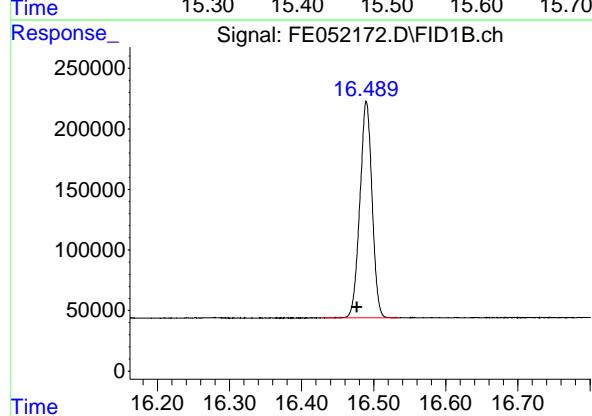


#10 N-TETRACOSANE

R.T.: 15.474 min  
 Delta R.T.: 0.013 min  
 Response: 2117307  
 Conc: 19.14 ug/ml  
 Instrument: FID\_E  
 ClientSampleId : PB166415BS

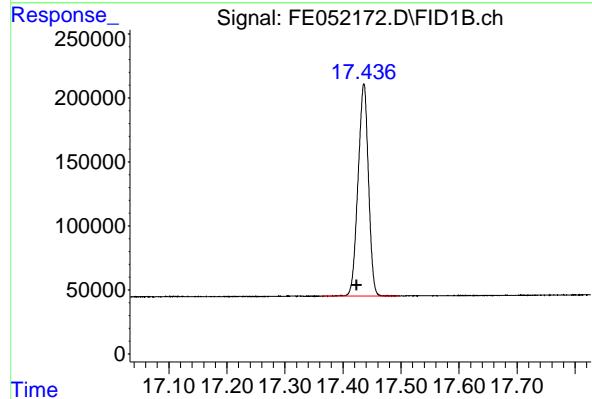
**Manual Integrations  
APPROVED**

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



#11 N-HEXACOSANE

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



#12 N-OCTACOSANE

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_E\Data\FE01312  
 Data File : FE052172.D  
 Signal (s) : FID1B.ch  
 Acq On : 31 Jan 2025 12: 38  
 Sample : PB166415BS  
 Misc :  
 ALS Vi al : 13 Sample Multi plier: 1

**Instrument :**

FID\_E

**ClientSampleId :**

PB166415BS

**Area Percent Report**

**Manual Integrations APPROVED**

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

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID\_E\methods\FE012325.M  
Title :

Signal : FID1B.ch

peak #	R. T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4. 930	4. 882	4. 974	BB	177047	1667496	76. 31%	7. 536%
2	7. 056	7. 020	7. 107	BB	195607	1831391	83. 81%	8. 276%
3	8. 860	8. 819	8. 913	BB	203032	1960262	89. 71%	8. 859%
4	10. 452	10. 412	10. 500	BB	205530	2054144	94. 00%	9. 283%
5	11. 884	11. 772	11. 920	BB	200340	2139250	97. 90%	9. 668%
6	13. 186	13. 143	13. 232	BB	194052	2185174	100. 00%	9. 875%
7	14. 376	14. 342	14. 417	BB	184985	2128002	97. 38%	9. 617%
8	15. 270	15. 191	15. 322	BB	148202	1871106	85. 63%	8. 456%
9	15. 474	15. 427	15. 513	BB	183502	2117307	96. 89%	9. 569%
10	16. 490	16. 428	16. 535	BB	178491	2103127	96. 25%	9. 504%
11	17. 436	17. 364	17. 497	BB	165740	2070572	94. 76%	9. 357%
				Sum of corrected areas:		22127831		

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

## Report of Analysis

Client:	RU2 Engineering, LLC			Date Collected:	01/30/25	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR			Date Received:	01/30/25	
Client Sample ID:	JPP-5.3-013025MS			SDG No.:	Q1232	
Lab Sample ID:	Q1241-05MS			Matrix:	SOIL	
Analytical Method:	8015D DRO			% Solid:	89.3	Decanted:
Sample Wt/Vol:	30.05	Units:	g	Final Vol:	1	mL
Soil Aliquot Vol:	uL			Test:	Diesel Range Organics	
Extraction Type:				Injection Volume :		
GPC Factor :	PH :					
Prep Method :	SW3541					

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

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
<b>TARGETS</b>						
DRO	DRO	150000	E	207	1860	ug/kg
<b>SURROGATES</b>						
16416-32-3	Tetracosane-d50	12.8		37 - 130	64%	SPK: 20

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

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

**Instrument :**  
**FID\_E**  
**ClientSampleId :**  
**JPP-5.3-013025MS**

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

Volume Inj. : 1uL  
 Signal Phase : Rx1-1ms  
 Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

9) S TETRACOSANE-d50 (SURR...	15.243	1271058	12.762 ug/ml
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Target Compounds

2) N-DECANE	4.973	1675110	18.306 ug/ml
3) N-DODECANE	7.095	1826036	18.276 ug/ml
4) N-TETRADECANE	8.848	414569	4.074 ug/ml
5) N-HEXADECANE	10.428	733215	6.881 ug/ml
6) N-OCTADECANE	11.865	126683	1.130 ug/ml
7) N-EICOSANE	13.165	991476	8.902 ug/ml
8) N-DOCOSANE	14.356	1338735	12.057 ug/ml
10) N-TETRACOSANE	15.449	647568	5.854 ug/ml
11) N-HEXACOSANE	16.476	419148	3.845 ug/ml
12) N-OCTACOSANE	17.451	10339978	95.794 ug/ml

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(f)=RT Delta &gt; 1/2 Window

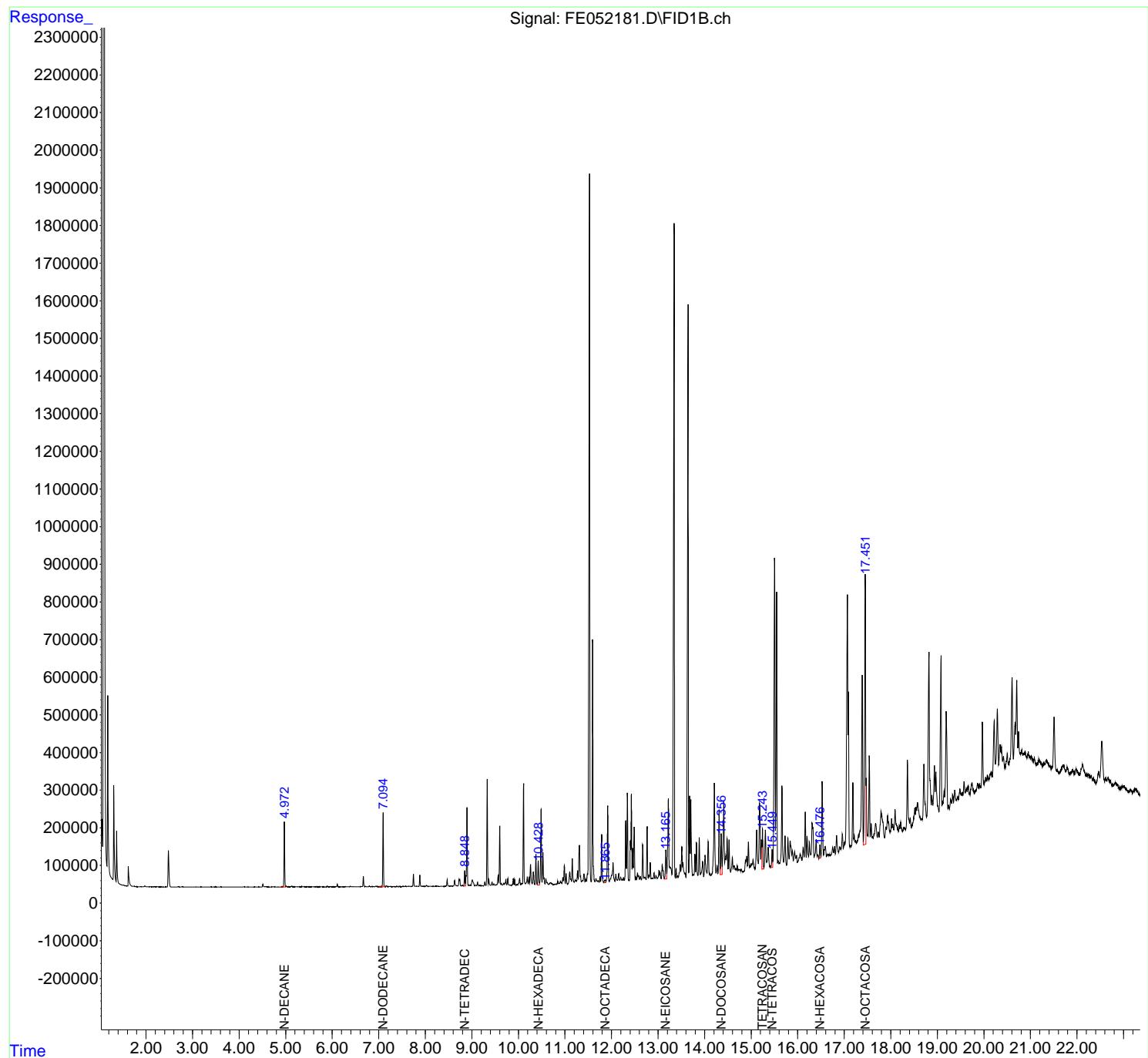
(m)=manual int.

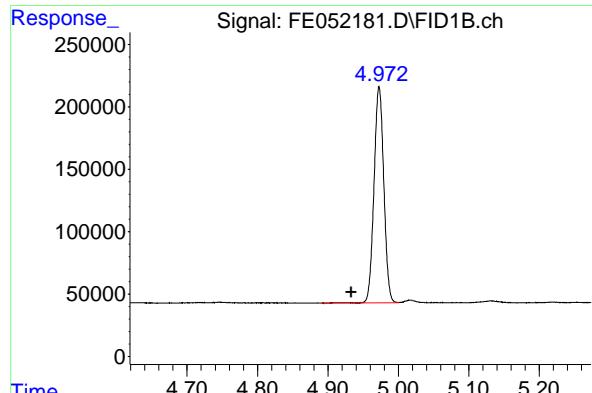
Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_E\Data\FE013125\  
 Data File : FE052181.D  
 Signal(s) : FID1B.ch  
 Acq On : 31 Jan 2025 17:10  
 Operator : YP\AJ  
 Sample : Q1241-05MS  
 Misc :  
 ALS Vial : 20 Sample Multiplier: 1

**Instrument :**  
**FID\_E**  
**ClientSampleId :**  
**JPP-5.3-013025MS**

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

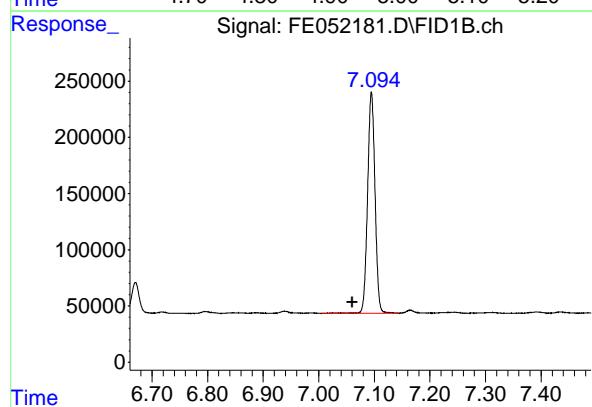
Volume Inj. : 1uL  
 Signal Phase : Rx1-1ms  
 Signal Info : 20mx0.18mmx0.18um





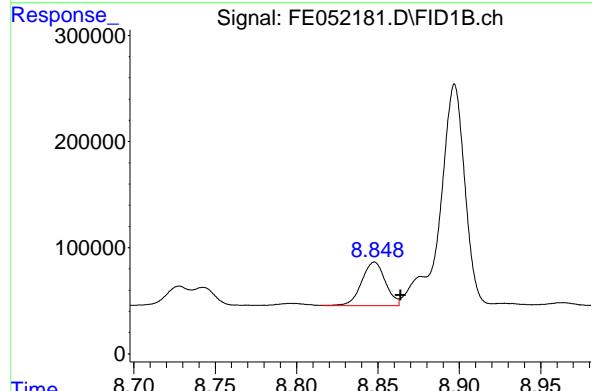
#2 N-DECANE

R.T.: 4.973 min  
Delta R.T.: 0.040 min  
Instrument: FID\_E  
Response: 1675110  
Conc: 18.31 ug/ml  
ClientSampleId: JPP-5.3-013025MS



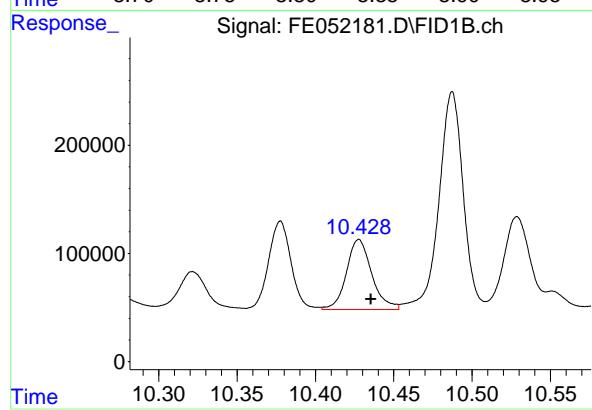
#3 N-DODECANE

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



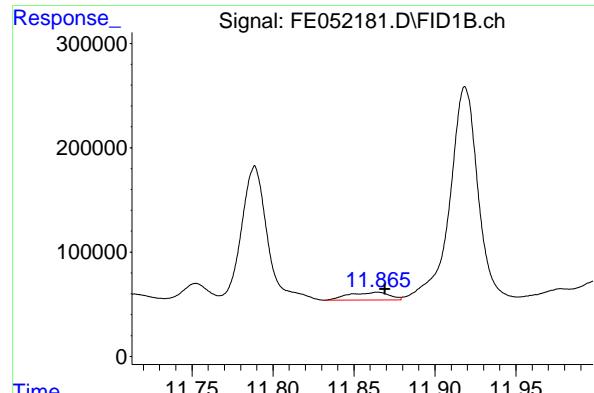
#4 N-TETRADECANE

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



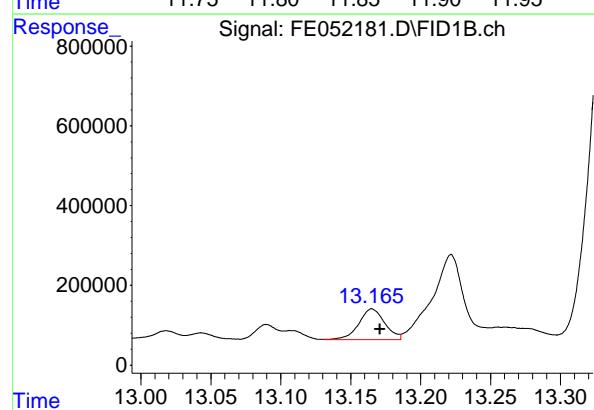
#5 N-HEXADECANE

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



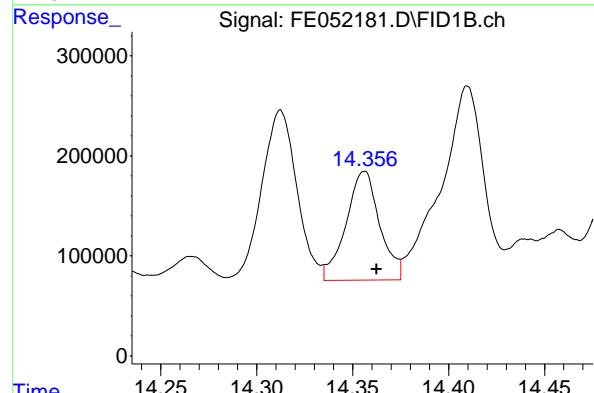
#6 N-OCTADECANE

R.T.: 11.865 min  
Delta R.T.: -0.004 min  
Instrument: FID\_E  
Response: 126683  
Conc: 1.13 ug/ml  
ClientSampleId : JPP-5.3-013025MS



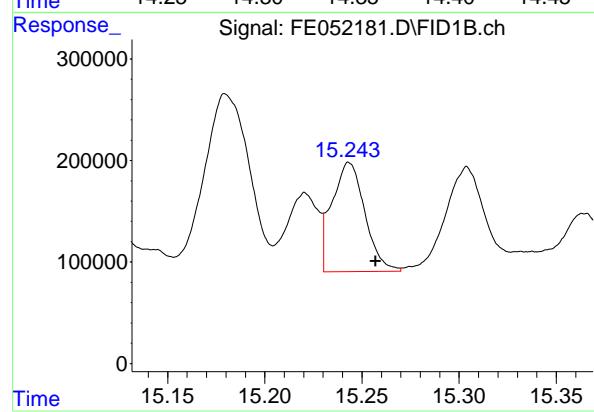
#7 N-EICOSANE

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



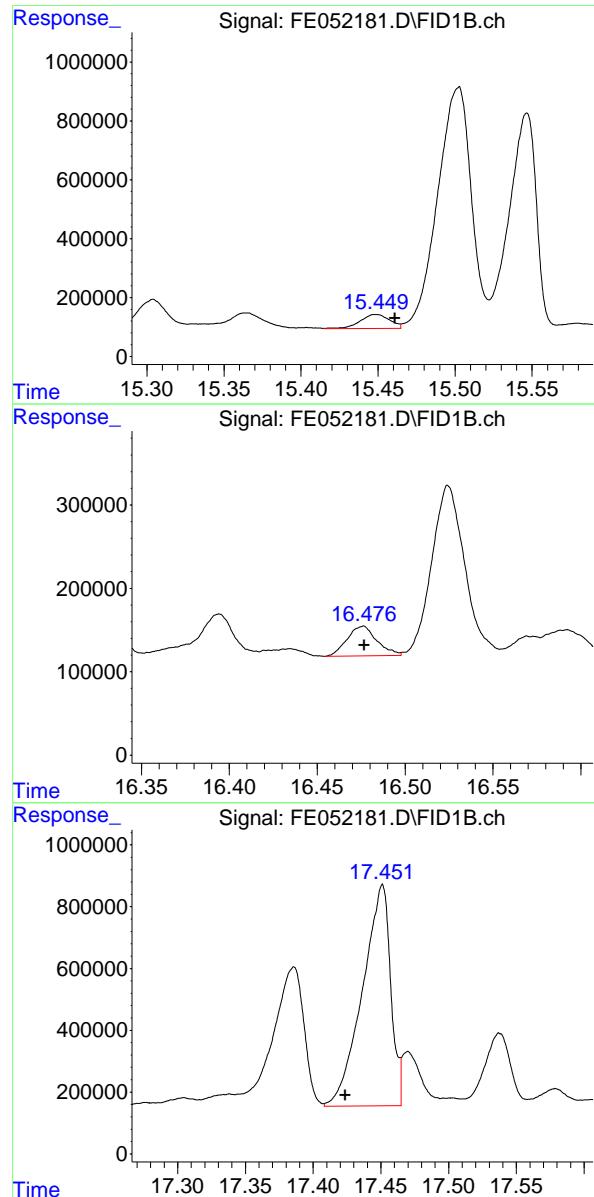
#8 N-DOCOSANE

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



#9 TETRACOSANE-d50 (SURROGATE)

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



## #10 N-TETRACOSANE

R.T.: 15.449 min  
 Delta R.T.: -0.012 min  
 Response: 647568 FID\_E  
 Conc: 5.85 ug/ml ClientSampleId : JPP-5.3-013025MS

## #11 N-HEXACOSANE

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

## #12 N-OCTACOSANE

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

## rteres

## Area Percent Report

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

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID\_E\methods\FE012325.M  
 Title :

Signal : FID1B.ch

peak #	R. T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4. 912	4. 852	4. 944	BH	301	3548	0. 01%	0. 001%
2	4. 973	4. 944	5. 001	HH	173549	1673818	6. 41%	0. 392%
3	5. 017	5. 001	5. 045	HH	2249	27945	0. 11%	0. 007%
4	5. 055	5. 045	5. 071	HH	348	4301	0. 02%	0. 001%
5	5. 088	5. 071	5. 098	HH	365	4282	0. 02%	0. 001%
6	5. 131	5. 098	5. 177	HH	1772	34366	0. 13%	0. 008%
7	5. 178	5. 177	5. 182	HH	231	509	0. 00%	0. 000%
8	5. 200	5. 182	5. 205	HH	385	3503	0. 01%	0. 001%
9	5. 218	5. 205	5. 240	HH	667	10080	0. 04%	0. 002%
10	5. 258	5. 240	5. 274	HH	513	8390	0. 03%	0. 002%
11	5. 280	5. 274	5. 292	HH	493	4116	0. 02%	0. 001%
12	5. 293	5. 292	5. 310	HH	404	2770	0. 01%	0. 001%
13	5. 317	5. 310	5. 323	HH	371	2087	0. 01%	0. 000%
14	5. 344	5. 323	5. 367	HH	922	15169	0. 06%	0. 004%
15	5. 383	5. 367	5. 413	HH	665	12202	0. 05%	0. 003%
16	5. 432	5. 413	5. 452	HH	409	6032	0. 02%	0. 001%
17	5. 471	5. 452	5. 538	HH	644	14634	0. 06%	0. 003%
18	5. 560	5. 538	5. 566	HH	514	4873	0. 02%	0. 001%
19	5. 572	5. 566	5. 578	HH	493	3115	0. 01%	0. 001%
20	5. 587	5. 578	5. 602	HH	453	5079	0. 02%	0. 001%
21	5. 618	5. 602	5. 629	HH	603	6087	0. 02%	0. 001%
22	5. 643	5. 629	5. 656	HH	365	4954	0. 02%	0. 001%
23	5. 660	5. 656	5. 678	HH	414	4210	0. 02%	0. 001%
24	5. 682	5. 678	5. 699	HH	389	2981	0. 01%	0. 001%
25	5. 708	5. 699	5. 714	HH	424	1879	0. 01%	0. 000%
26	5. 729	5. 714	5. 744	HH	421	5500	0. 02%	0. 001%
27	5. 774	5. 744	5. 798	HH	646	12803	0. 05%	0. 003%
28	5. 812	5. 798	5. 830	HH	433	4755	0. 02%	0. 001%
29	5. 842	5. 830	5. 855	HH	209	2015	0. 01%	0. 000%
30	5. 895	5. 855	5. 922	HH	2158	27880	0. 11%	0. 007%
31	5. 931	5. 922	5. 941	HH	420	3428	0. 01%	0. 001%
32	5. 956	5. 941	5. 961	HH	433	4001	0. 02%	0. 001%
33	5. 968	5. 961	5. 994	HH	393	6550	0. 03%	0. 002%
34	5. 997	5. 994	6. 006	HH	255	1141	0. 00%	0. 000%
35	6. 010	6. 006	6. 020	HH	212	1249	0. 00%	0. 000%
36	6. 038	6. 020	6. 065	HH	371	6074	0. 02%	0. 001%

					rteres			
37	6. 084	6. 065	6. 095	HH	1163	12749	0. 05%	0. 003%
38	6. 111	6. 095	6. 155	HH	7701	87789	0. 34%	0. 021%
39	6. 166	6. 155	6. 178	HH	426	4337	0. 02%	0. 001%
40	6. 203	6. 178	6. 216	HH	695	9678	0. 04%	0. 002%
41	6. 229	6. 216	6. 251	HH	430	6817	0. 03%	0. 002%
42	6. 267	6. 251	6. 278	HH	432	5536	0. 02%	0. 001%
43	6. 291	6. 278	6. 310	HH	899	12507	0. 05%	0. 003%
44	6. 319	6. 310	6. 341	HH	772	10696	0. 04%	0. 003%
45	6. 391	6. 341	6. 427	HH	1984	38765	0. 15%	0. 009%
46	6. 442	6. 427	6. 461	HH	1215	14274	0. 05%	0. 003%
47	6. 491	6. 461	6. 498	HH	683	11350	0. 04%	0. 003%
48	6. 508	6. 498	6. 520	HH	751	8978	0. 03%	0. 002%
49	6. 537	6. 520	6. 552	HH	788	12276	0. 05%	0. 003%
50	6. 563	6. 552	6. 581	HH	757	10464	0. 04%	0. 002%
51	6. 584	6. 581	6. 595	HH	559	4038	0. 02%	0. 001%
52	6. 612	6. 595	6. 625	HH	1238	16979	0. 07%	0. 004%
53	6. 638	6. 625	6. 645	HH	1170	12392	0. 05%	0. 003%
54	6. 670	6. 645	6. 705	HH	28119	288565	1. 11%	0. 068%
55	6. 718	6. 705	6. 742	HH	1805	24754	0. 09%	0. 006%
56	6. 746	6. 742	6. 772	HH	755	11330	0. 04%	0. 003%
57	6. 796	6. 772	6. 829	HH	2225	40055	0. 15%	0. 009%
58	6. 847	6. 829	6. 874	HH	1092	24345	0. 09%	0. 006%
59	6. 888	6. 874	6. 913	HH	1169	19844	0. 08%	0. 005%
60	6. 939	6. 913	6. 963	HH	2513	39968	0. 15%	0. 009%
61	6. 967	6. 963	6. 973	HH	869	5247	0. 02%	0. 001%
62	6. 988	6. 973	7. 005	HH	970	15781	0. 06%	0. 004%
63	7. 028	7. 005	7. 038	HH	904	15832	0. 06%	0. 004%
64	7. 049	7. 038	7. 062	HH	970	12223	0. 05%	0. 003%
65	7. 095	7. 062	7. 144	HH	197146	1855219	7. 11%	0. 434%
66	7. 164	7. 144	7. 197	HH	3474	51161	0. 20%	0. 012%
67	7. 244	7. 197	7. 266	HH	1618	46495	0. 18%	0. 011%
68	7. 276	7. 266	7. 284	HH	905	9001	0. 03%	0. 002%
69	7. 312	7. 284	7. 344	HH	1291	35397	0. 14%	0. 008%
70	7. 394	7. 344	7. 415	HH	1841	46768	0. 18%	0. 011%
71	7. 436	7. 415	7. 472	HH	1883	40252	0. 15%	0. 009%
72	7. 484	7. 472	7. 491	HH	1091	10628	0. 04%	0. 002%
73	7. 495	7. 491	7. 502	HH	1006	7040	0. 03%	0. 002%
74	7. 518	7. 502	7. 542	HH	2250	33657	0. 13%	0. 008%
75	7. 556	7. 542	7. 573	HH	1967	28785	0. 11%	0. 007%
76	7. 586	7. 573	7. 602	HH	1608	23653	0. 09%	0. 006%
77	7. 622	7. 602	7. 643	HH	1734	38206	0. 15%	0. 009%
78	7. 654	7. 643	7. 667	HH	1897	23931	0. 09%	0. 006%
79	7. 677	7. 667	7. 697	HH	1964	30233	0. 12%	0. 007%
80	7. 699	7. 697	7. 712	HH	1471	12574	0. 05%	0. 003%
81	7. 746	7. 712	7. 774	HH	33821	361973	1. 39%	0. 085%
82	7. 784	7. 774	7. 789	HH	1916	16740	0. 06%	0. 004%
83	7. 804	7. 789	7. 816	HH	2440	33433	0. 13%	0. 008%
84	7. 818	7. 816	7. 829	HH	2084	15395	0. 06%	0. 004%
85	7. 839	7. 829	7. 861	HH	2104	32715	0. 13%	0. 008%
86	7. 884	7. 861	7. 915	HH	31767	329841	1. 26%	0. 077%
87	7. 925	7. 915	7. 947	HH	1936	32238	0. 12%	0. 008%
88	7. 961	7. 947	7. 972	HH	1605	21121	0. 08%	0. 005%
89	7. 979	7. 972	7. 989	HH	1525	15582	0. 06%	0. 004%

					rteres				
90	8. 026	7. 989	8. 071	HH	4554	109629	0. 42%	0. 026%	
91	8. 087	8. 071	8. 091	HH	1854	21085	0. 08%	0. 005%	
92	8. 107	8. 091	8. 126	HH	2074	39446	0. 15%	0. 009%	
93	8. 132	8. 126	8. 162	HH	1846	34672	0. 13%	0. 008%	
94	8. 184	8. 162	8. 189	HH	1780	25537	0. 10%	0. 006%	
95	8. 218	8. 189	8. 229	HH	2167	45517	0. 17%	0. 011%	
96	8. 239	8. 229	8. 261	HH	2268	38582	0. 15%	0. 009%	
97	8. 272	8. 261	8. 304	HH	1899	39825	0. 15%	0. 009%	
98	8. 326	8. 304	8. 333	HH	2136	30659	0. 12%	0. 007%	
99	8. 343	8. 333	8. 356	HH	2080	26062	0. 10%	0. 006%	
100	8. 360	8. 356	8. 392	HH	2019	38209	0. 15%	0. 009%	
101	8. 395	8. 392	8. 410	HH	1699	17914	0. 07%	0. 004%	
102	8. 434	8. 410	8. 447	HH	2513	46695	0. 18%	0. 011%	
103	8. 471	8. 447	8. 497	HH	19903	235290	0. 90%	0. 055%	
104	8. 506	8. 497	8. 537	HH	2890	58282	0. 22%	0. 014%	
105	8. 550	8. 537	8. 567	HH	2681	43486	0. 17%	0. 010%	
106	8. 578	8. 567	8. 583	HH	2638	23779	0. 09%	0. 006%	
107	8. 593	8. 583	8. 608	HH	2854	39533	0. 15%	0. 009%	
108	8. 630	8. 608	8. 667	HH	17456	263814	1. 01%	0. 062%	
109	8. 676	8. 667	8. 695	HH	3584	53156	0. 20%	0. 012%	
110	8. 728	8. 695	8. 736	HH	21037	243054	0. 93%	0. 057%	
111	8. 743	8. 736	8. 779	HH	19833	227334	0. 87%	0. 053%	
112	8. 797	8. 779	8. 816	HH	4784	82896	0. 32%	0. 019%	
113	8. 848	8. 816	8. 863	HH	43912	491986	1. 88%	0. 115%	
114	8. 897	8. 863	8. 921	HH	211363	2311378	8. 85%	0. 541%	
115	8. 928	8. 921	8. 945	HH	4885	60237	0. 23%	0. 014%	
116	8. 964	8. 945	8. 982	HH	5395	91701	0. 35%	0. 021%	
117	9. 010	8. 982	9. 066	HH	19096	522931	2. 00%	0. 122%	
118	9. 081	9. 066	9. 107	HH	5091	104365	0. 40%	0. 024%	
119	9. 124	9. 107	9. 152	HH	13271	189727	0. 73%	0. 044%	
120	9. 166	9. 152	9. 181	HH	4975	74293	0. 28%	0. 017%	
121	9. 197	9. 181	9. 216	HH	3722	74500	0. 29%	0. 017%	
122	9. 228	9. 216	9. 241	HH	3259	46074	0. 18%	0. 011%	
123	9. 248	9. 241	9. 252	HH	3257	21453	0. 08%	0. 005%	
124	9. 279	9. 252	9. 302	HH	13232	202753	0. 78%	0. 047%	
125	9. 332	9. 302	9. 352	HH	286408	2829735	10. 84%	0. 662%	
126	9. 365	9. 352	9. 410	HH	20953	331821	1. 27%	0. 078%	
127	9. 435	9. 410	9. 456	HH	13110	213991	0. 82%	0. 050%	
128	9. 472	9. 456	9. 501	HH	8530	177307	0. 68%	0. 041%	
129	9. 517	9. 501	9. 522	HH	5978	70952	0. 27%	0. 017%	
130	9. 534	9. 522	9. 541	HH	6256	66145	0. 25%	0. 015%	
131	9. 567	9. 541	9. 582	HH	31162	440259	1. 69%	0. 103%	
132	9. 601	9. 582	9. 623	HH	161969	1630870	6. 25%	0. 382%	
133	9. 634	9. 623	9. 664	HH	9640	169000	0. 65%	0. 040%	
134	9. 685	9. 664	9. 700	HH	10222	161828	0. 62%	0. 038%	
135	9. 732	9. 700	9. 750	HH	19520	337599	1. 29%	0. 079%	
136	9. 774	9. 750	9. 796	HH	22602	322032	1. 23%	0. 075%	
137	9. 800	9. 796	9. 819	HH	5986	74089	0. 28%	0. 017%	
138	9. 833	9. 819	9. 851	HH	5041	89635	0. 34%	0. 021%	
139	9. 890	9. 851	9. 906	HH	22259	339508	1. 30%	0. 079%	
140	9. 921	9. 906	9. 950	HH	20946	283191	1. 08%	0. 066%	
141	9. 974	9. 950	9. 987	HH	6199	124889	0. 48%	0. 029%	

rteres								
142	10. 025	9. 987	10. 047	HH	23055	426056	1. 63%	0. 100%
143	10. 066	10. 047	10. 073	HH	8887	123143	0. 47%	0. 029%
144	10. 082	10. 073	10. 087	HH	8693	67830	0. 26%	0. 016%
145	10. 112	10. 087	10. 157	HH	274329	2925521	11. 21%	0. 685%
146	10. 191	10. 157	10. 213	HH	26683	515880	1. 98%	0. 121%
147	10. 229	10. 213	10. 243	HH	25709	297800	1. 14%	0. 070%
148	10. 263	10. 243	10. 298	HH	60192	925135	3. 54%	0. 217%
149	10. 322	10. 298	10. 356	HH	40382	633324	2. 43%	0. 148%
150	10. 378	10. 356	10. 404	HH	87209	972953	3. 73%	0. 228%
151	10. 428	10. 404	10. 453	HH	70235	887713	3. 40%	0. 208%
152	10. 487	10. 453	10. 509	HH	206954	2353209	9. 01%	0. 551%
153	10. 529	10. 509	10. 572	HH	91418	1360959	5. 21%	0. 319%
154	10. 592	10. 572	10. 611	HH	22614	345571	1. 32%	0. 081%
155	10. 620	10. 611	10. 645	HH	12273	193978	0. 74%	0. 045%
156	10. 691	10. 645	10. 715	HH	11701	399215	1. 53%	0. 093%
157	10. 727	10. 715	10. 759	HH	9987	199674	0. 76%	0. 047%
158	10. 790	10. 759	10. 802	HH	8038	182229	0. 70%	0. 043%
159	10. 811	10. 802	10. 823	HH	7977	100117	0. 38%	0. 023%
160	10. 846	10. 823	10. 867	HH	15569	292687	1. 12%	0. 069%
161	10. 878	10. 867	10. 886	HH	9670	105180	0. 40%	0. 025%
162	10. 903	10. 886	10. 916	HH	15711	225586	0. 86%	0. 053%
163	10. 923	10. 916	10. 936	HH	12121	132411	0. 51%	0. 031%
164	10. 954	10. 936	10. 966	HH	25034	337560	1. 29%	0. 079%
165	10. 987	10. 966	11. 009	HH	57811	836100	3. 20%	0. 196%
166	11. 027	11. 009	11. 057	HH	36013	535227	2. 05%	0. 125%
167	11. 103	11. 057	11. 120	HH	39695	753333	2. 89%	0. 176%
168	11. 127	11. 120	11. 140	HH	21664	233089	0. 89%	0. 055%
169	11. 160	11. 140	11. 193	HH	76054	1115449	4. 27%	0. 261%
170	11. 198	11. 193	11. 207	HH	13664	111325	0. 43%	0. 026%
171	11. 222	11. 207	11. 232	HH	18566	240850	0. 92%	0. 056%
172	11. 239	11. 232	11. 249	HH	17433	175486	0. 67%	0. 041%
173	11. 271	11. 249	11. 285	HH	43266	626518	2. 40%	0. 147%
174	11. 313	11. 285	11. 332	HH	111137	1904391	7. 30%	0. 446%
175	11. 336	11. 332	11. 354	HH	27886	292246	1. 12%	0. 068%
176	11. 379	11. 354	11. 390	HH	17769	338513	1. 30%	0. 079%
177	11. 408	11. 390	11. 427	HH	34559	531209	2. 03%	0. 124%
178	11. 442	11. 427	11. 463	HH	20914	382244	1. 46%	0. 089%
179	11. 483	11. 463	11. 489	HH	35668	415314	1. 59%	0. 097%
180	11. 530	11. 489	11. 562	HH	1891774	24689658	94. 58%	5. 779%
181	11. 593	11. 562	11. 647	HH	656863	7375721	28. 25%	1. 726%
182	11. 667	11. 647	11. 702	HH	22104	577695	2. 21%	0. 135%
183	11. 713	11. 702	11. 733	HH	17130	282149	1. 08%	0. 066%
184	11. 752	11. 733	11. 767	HH	27166	397359	1. 52%	0. 093%
185	11. 789	11. 767	11. 832	HH	140179	1847006	7. 08%	0. 432%
186	11. 865	11. 832	11. 879	HH	18783	448895	1. 72%	0. 105%
187	11. 919	11. 879	11. 952	HH	215782	2972671	11. 39%	0. 696%
188	11. 979	11. 952	11. 983	HH	22021	346633	1. 33%	0. 081%
189	12. 031	11. 983	12. 074	HH	65145	1735857	6. 65%	0. 406%
190	12. 095	12. 074	12. 122	HH	34540	696803	2. 67%	0. 163%
191	12. 156	12. 122	12. 175	HH	35648	748439	2. 87%	0. 175%
192	12. 196	12. 175	12. 220	HH	26066	570205	2. 18%	0. 133%
193	12. 233	12. 220	12. 244	HH	19791	270280	1. 04%	0. 063%
194	12. 259	12. 244	12. 275	HH	24751	389042	1. 49%	0. 091%

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195	12. 307	12. 275	12. 322	HH	176642	2228603	8. 54%	0. 522%	
196	12. 339	12. 322	12. 367	HH	249361	2854829	10. 94%	0. 668%	
197	12. 375	12. 367	12. 381	HH	17851	143971	0. 55%	0. 034%	
198	12. 405	12. 381	12. 413	HH	123096	1342825	5. 14%	0. 314%	
199	12. 427	12. 413	12. 442	HH	247359	2713561	10. 39%	0. 635%	
200	12. 456	12. 442	12. 469	HH	103430	1213147	4. 65%	0. 284%	
201	12. 486	12. 469	12. 507	HH	159381	1950988	7. 47%	0. 457%	
202	12. 520	12. 507	12. 535	HH	27098	381814	1. 46%	0. 089%	
203	12. 559	12. 535	12. 572	HH	37310	629947	2. 41%	0. 147%	
204	12. 581	12. 572	12. 601	HH	30113	452134	1. 73%	0. 106%	
205	12. 622	12. 601	12. 642	HH	27723	586134	2. 25%	0. 137%	
206	12. 668	12. 642	12. 705	HH	112652	1831695	7. 02%	0. 429%	
207	12. 714	12. 705	12. 743	HH	25228	534434	2. 05%	0. 125%	
208	12. 768	12. 743	12. 789	HH	160837	2024883	7. 76%	0. 474%	
209	12. 803	12. 789	12. 812	HH	32001	406725	1. 56%	0. 095%	
210	12. 830	12. 812	12. 856	HH	65450	1016318	3. 89%	0. 238%	
211	12. 880	12. 856	12. 894	HH	23719	522427	2. 00%	0. 122%	
212	12. 917	12. 894	12. 936	HH	37603	723791	2. 77%	0. 169%	
213	12. 954	12. 936	12. 989	HH	30555	810573	3. 11%	0. 190%	
214	13. 018	12. 989	13. 032	HH	43404	851129	3. 26%	0. 199%	
215	13. 043	13. 032	13. 072	HH	38383	698607	2. 68%	0. 164%	
216	13. 090	13. 072	13. 103	HH	59246	810842	3. 11%	0. 190%	
217	13. 108	13. 103	13. 131	HH	43730	568020	2. 18%	0. 133%	
218	13. 165	13. 131	13. 186	HH	98926	1695235	6. 49%	0. 397%	
219	13. 222	13. 186	13. 250	HH	234478	4250263	16. 28%	0. 995%	
220	13. 255	13. 250	13. 297	HH	52834	1324010	5. 07%	0. 310%	
221	13. 346	13. 297	13. 371	HH	1749935	26104905	100. 00%	6. 110%	
222	13. 388	13. 371	13. 405	HH	49209	717286	2. 75%	0. 168%	
223	13. 419	13. 405	13. 433	HH	29984	470168	1. 80%	0. 110%	
224	13. 475	13. 433	13. 489	HH	59251	1386486	5. 31%	0. 325%	
225	13. 511	13. 489	13. 526	HH	107271	1637659	6. 27%	0. 383%	
226	13. 535	13. 526	13. 568	HH	65019	1254969	4. 81%	0. 294%	
227	13. 579	13. 568	13. 596	HH	37303	554816	2. 13%	0. 130%	
228	13. 644	13. 596	13. 660	HH	1548929	21592296	82. 71%	5. 054%	
229	13. 679	13. 660	13. 692	HH	241516	2837276	10. 87%	0. 664%	
230	13. 706	13. 692	13. 738	HH	232764	3130213	11. 99%	0. 733%	
231	13. 759	13. 738	13. 771	HH	33974	630338	2. 41%	0. 148%	
232	13. 790	13. 771	13. 805	HH	87321	1208349	4. 63%	0. 283%	
233	13. 824	13. 805	13. 852	HH	118244	1877447	7. 19%	0. 439%	
234	13. 883	13. 852	13. 907	HH	131585	2114764	8. 10%	0. 495%	
235	13. 956	13. 907	13. 977	HH	67813	1875151	7. 18%	0. 439%	
236	14. 011	13. 977	14. 050	HH	84308	2210345	8. 47%	0. 517%	
237	14. 075	14. 050	14. 100	HH	121019	2191198	8. 39%	0. 513%	
238	14. 112	14. 100	14. 129	HH	35841	579204	2. 22%	0. 136%	
239	14. 208	14. 129	14. 245	HH	275057	5974430	22. 89%	1. 398%	
240	14. 266	14. 245	14. 284	HH	56614	1075545	4. 12%	0. 252%	
241	14. 312	14. 284	14. 335	HH	203460	3167095	12. 13%	0. 741%	
242	14. 356	14. 335	14. 375	HH	141724	2131155	8. 16%	0. 499%	
243	14. 410	14. 375	14. 430	HH	227040	4119628	15. 78%	0. 964%	
244	14. 440	14. 430	14. 446	HH	73977	681032	2. 61%	0. 159%	
245	14. 458	14. 446	14. 468	HH	83625	1027423	3. 94%	0. 240%	
246	14. 484	14. 468	14. 503	HH	128038	1884778	7. 22%	0. 441%	

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247	14. 523	14. 503	14. 556	HH	125370	2281197	8. 74%	0. 534%	
248	14. 594	14. 556	14. 611	HH	77945	1847526	7. 08%	0. 432%	
249	14. 635	14. 611	14. 655	HH	56758	1391424	5. 33%	0. 326%	
250	14. 671	14. 655	14. 684	HH	49409	820441	3. 14%	0. 192%	
251	14. 701	14. 684	14. 717	HH	56904	970878	3. 72%	0. 227%	
252	14. 727	14. 717	14. 735	HH	47151	504653	1. 93%	0. 118%	
253	14. 743	14. 735	14. 768	HH	46456	911728	3. 49%	0. 213%	
254	14. 788	14. 768	14. 823	HH	47522	1406541	5. 39%	0. 329%	
255	14. 840	14. 823	14. 852	HH	42638	725022	2. 78%	0. 170%	
256	14. 876	14. 852	14. 886	HH	71079	1232064	4. 72%	0. 288%	
257	14. 904	14. 886	14. 920	HH	81172	1438495	5. 51%	0. 337%	
258	14. 939	14. 920	14. 961	HH	119703	2015867	7. 72%	0. 472%	
259	14. 974	14. 961	14. 983	HH	56623	742191	2. 84%	0. 174%	
260	15. 000	14. 983	15. 008	HH	61235	858573	3. 29%	0. 201%	
261	15. 039	15. 008	15. 084	HH	72671	2679598	10. 26%	0. 627%	
262	15. 117	15. 084	15. 153	HH	151819	3706381	14. 20%	0. 867%	
263	15. 180	15. 153	15. 205	HH	222789	4324746	16. 57%	1. 012%	
264	15. 221	15. 205	15. 230	HH	125771	1620445	6. 21%	0. 379%	
265	15. 243	15. 230	15. 270	HH	155298	2407665	9. 22%	0. 564%	
266	15. 304	15. 270	15. 340	HH	151460	3659536	14. 02%	0. 856%	
267	15. 364	15. 340	15. 397	HH	104717	2674047	10. 24%	0. 626%	
268	15. 404	15. 397	15. 415	HH	55338	569453	2. 18%	0. 133%	
269	15. 449	15. 415	15. 465	HH	99406	2190188	8. 39%	0. 513%	
270	15. 502	15. 465	15. 522	HH	871496	14267128	54. 65%	3. 339%	
271	15. 547	15. 522	15. 567	HH	783742	10381130	39. 77%	2. 430%	
272	15. 580	15. 567	15. 605	HH	70051	1478133	5. 66%	0. 346%	
273	15. 661	15. 605	15. 695	HH	269064	6123593	23. 46%	1. 433%	
274	15. 727	15. 695	15. 762	HH	136192	3439246	13. 17%	0. 805%	
275	15. 788	15. 762	15. 816	HH	130750	2947693	11. 29%	0. 690%	
276	15. 838	15. 816	15. 872	HH	122631	3433656	13. 15%	0. 804%	
277	15. 885	15. 872	15. 907	HH	96134	1764825	6. 76%	0. 413%	
278	15. 933	15. 907	15. 958	HH	94455	2558945	9. 80%	0. 599%	
279	15. 973	15. 958	15. 996	HH	83398	1703112	6. 52%	0. 399%	
280	16. 052	15. 996	16. 093	HH	87879	4486013	17. 18%	1. 050%	
281	16. 116	16. 093	16. 138	HH	104381	2427453	9. 30%	0. 568%	
282	16. 161	16. 138	16. 181	HH	199341	3380806	12. 95%	0. 791%	
283	16. 199	16. 181	16. 232	HH	135266	3114075	11. 93%	0. 729%	
284	16. 249	16. 232	16. 283	HH	120590	2940228	11. 26%	0. 688%	
285	16. 308	16. 283	16. 320	HH	170678	3007320	11. 52%	0. 704%	
286	16. 324	16. 320	16. 352	HH	159078	2272582	8. 71%	0. 532%	
287	16. 394	16. 352	16. 417	HH	126472	3774007	14. 46%	0. 883%	
288	16. 434	16. 417	16. 454	HH	84921	1786925	6. 85%	0. 418%	
289	16. 476	16. 454	16. 497	HH	111819	2407182	9. 22%	0. 563%	
290	16. 525	16. 497	16. 555	HH	279785	5327176	20. 41%	1. 247%	
291	16. 570	16. 555	16. 577	HH	99245	1273626	4. 88%	0. 298%	
292	16. 592	16. 577	16. 620	HH	107593	2451281	9. 39%	0. 574%	
293	16. 631	16. 620	16. 637	HH	84306	873440	3. 35%	0. 204%	
294	16. 654	16. 637	16. 673	HH	87614	1832294	7. 02%	0. 429%	
295	16. 685	16. 673	16. 700	HH	86902	1348669	5. 17%	0. 316%	
296	16. 749	16. 700	16. 774	HH	105538	4098215	15. 70%	0. 959%	
297	16. 791	16. 774	16. 809	HH	107657	2059516	7. 89%	0. 482%	
298	16. 834	16. 809	16. 878	HH	137219	4495672	17. 22%	1. 052%	
299	16. 905	16. 878	16. 933	HH	106759	3353762	12. 85%	0. 785%	

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300	16. 957	16. 933	16. 980	HH	140950	3347235	12. 82%	0. 783%	
301	17. 004	16. 980	17. 016	HH	119496	2440069	9. 35%	0. 571%	
302	17. 067	17. 016	17. 081	HH	776713	15700979	60. 15%	3. 675%	
303	17. 089	17. 081	17. 115	HH	517488	5852524	22. 42%	1. 370%	
304	17. 126	17. 115	17. 141	HH	110576	1722497	6. 60%	0. 403%	
305	17. 185	17. 141	17. 203	HH	277800	6091367	23. 33%	1. 426%	
306	17. 213	17. 203	17. 229	HH	138572	2036588	7. 80%	0. 477%	
307	17. 240	17. 229	17. 259	HH	123771	2112154	8. 09%	0. 494%	
308	17. 276	17. 259	17. 284	HH	123777	1832614	7. 02%	0. 429%	
309	17. 305	17. 284	17. 317	HH	139457	2635834	10. 10%	0. 617%	
310	17. 386	17. 317	17. 408	HH	563003	13813880	52. 92%	3. 233%	
311	17. 451	17. 408	17. 461	HHA	829208	13546539	51. 89%	3. 171%	
					Sum of corrected areas:	427267569			

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

## Report of Analysis

Client:	RU2 Engineering, LLC			Date Collected:	01/30/25	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR			Date Received:	01/30/25	
Client Sample ID:	JPP-5.3-013025MSD			SDG No.:	Q1232	
Lab Sample ID:	Q1241-05MSD			Matrix:	SOIL	
Analytical Method:	8015D DRO			% Solid:	89.3	Decanted:
Sample Wt/Vol:	30.02	Units:	g	Final Vol:	1	mL
Soil Aliquot Vol:	uL			Test:	Diesel Range Organics	
Extraction Type:				Injection Volume :		
GPC Factor :	PH :					
Prep Method :	SW3541					

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

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
<b>TARGETS</b>						
DRO	DRO	152000	E	207	1870	ug/kg
<b>SURROGATES</b>						
16416-32-3	Tetracosane-d50	12.4		37 - 130	62%	SPK: 20

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

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

**Instrument :**  
**FID\_E**  
**ClientSampleId :**  
**JPP-5.3-013025MSD**

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

Volume Inj. : 1uL  
 Signal Phase : Rx1-1ms  
 Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

9) S TETRACOSANE-d50 (SURR...	15.248	1234688	12.397 ug/ml
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Target Compounds

2) N-DECANE	4.978	1653958	18.075 ug/ml
3) N-DODECANE	7.099	1805020	18.065 ug/ml
4) N-TETRADECANE	8.852	403253	3.963 ug/ml
5) N-HEXADECANE	10.433	725075	6.804 ug/ml
6) N-OCTADECANE	11.869	119565	1.066 ug/ml
7) N-EICOSANE	13.170	970798	8.716 ug/ml
8) N-DOCOSANE	14.360	1318984	11.879 ug/ml
10) N-TETRACOSANE	15.453	606157	5.480 ug/ml
11) N-HEXACOSANE	16.478	426274	3.910 ug/ml
12) N-OCTACOSANE	17.454	10079391	93.380 ug/ml

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(f)=RT Delta &gt; 1/2 Window

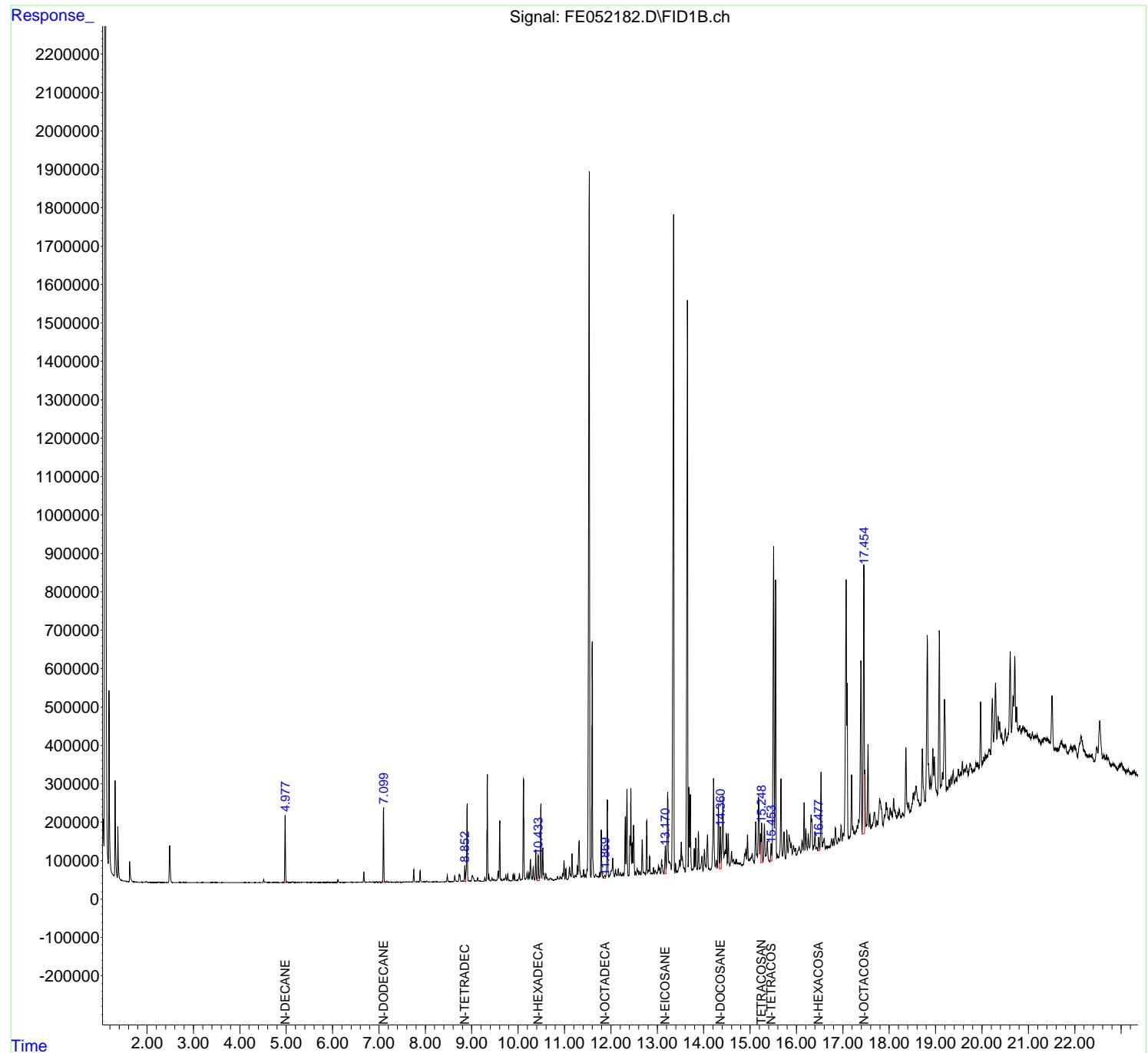
(m)=manual int.

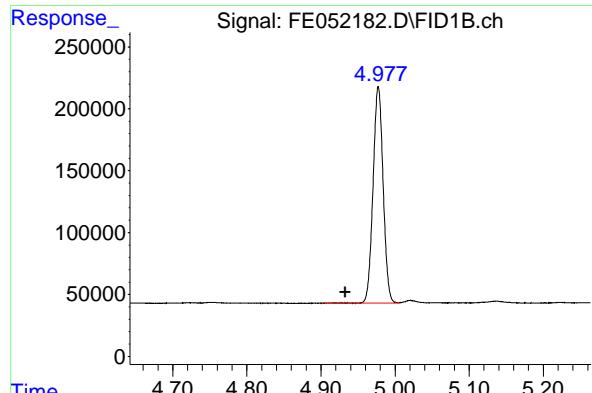
Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_E\Data\FE013125\  
 Data File : FE052182.D  
 Signal(s) : FID1B.ch  
 Acq On : 31 Jan 2025 17:40  
 Operator : YP\AJ  
 Sample : Q1241-05MSD  
 Misc :  
 ALS Vial : 21 Sample Multiplier: 1

**Instrument :**  
**FID\_E**  
**ClientSampleId :**  
**JPP-5.3-013025MSD**

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

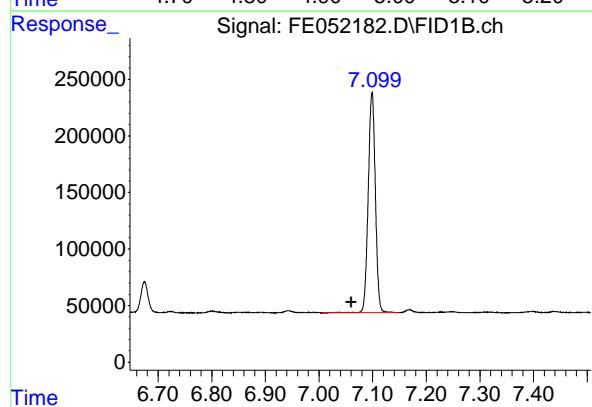
Volume Inj. : 1uL  
 Signal Phase : Rx1-1ms  
 Signal Info : 20mx0.18mmx0.18um





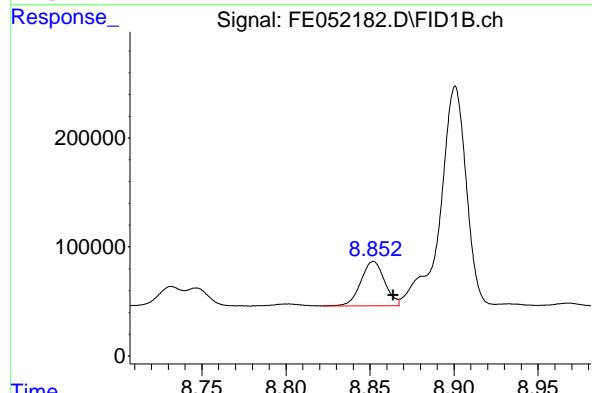
#2 N-DECANE

R.T.: 4.978 min  
Delta R.T.: 0.045 min  
Instrument: FID\_E  
Response: 1653958  
Conc: 18.08 ug/ml  
ClientSampleId : JPP-5.3-013025MSD



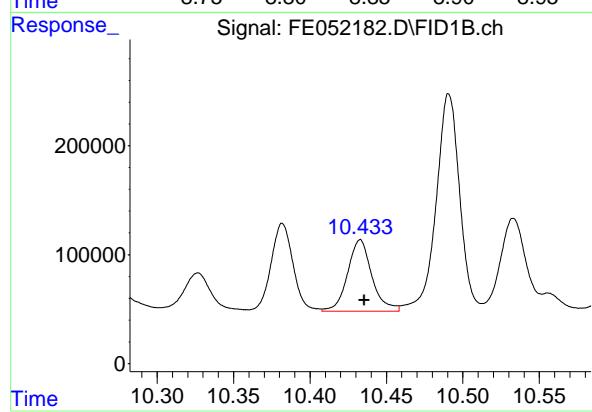
#3 N-DODECANE

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



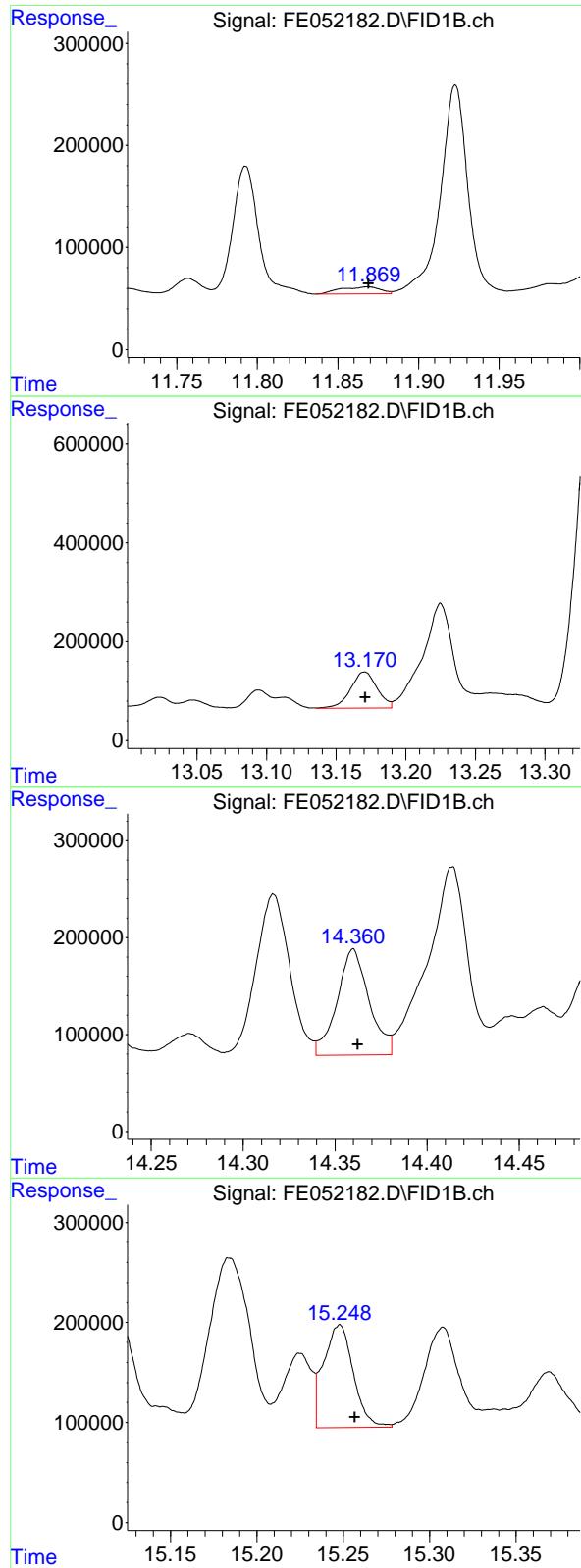
#4 N-TETRADECANE

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



#5 N-HEXADECANE

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



## #6 N-OCTADECANE

R.T.: 11.869 min  
 Delta R.T.: 0.000 min  
 Response: 119565 FID\_E  
 Conc: 1.07 ug/ml ClientSampleId : JPP-5.3-013025MSD

## #7 N-EICOSANE

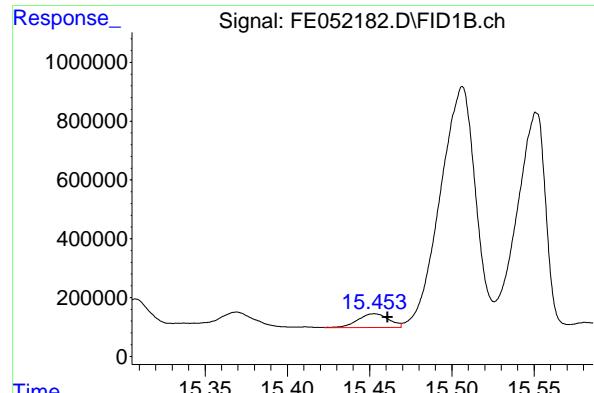
R.T.: 13.170 min  
 Delta R.T.: 0.000 min  
 Response: 970798  
 Conc: 8.72 ug/ml

## #8 N-DOCOSANE

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

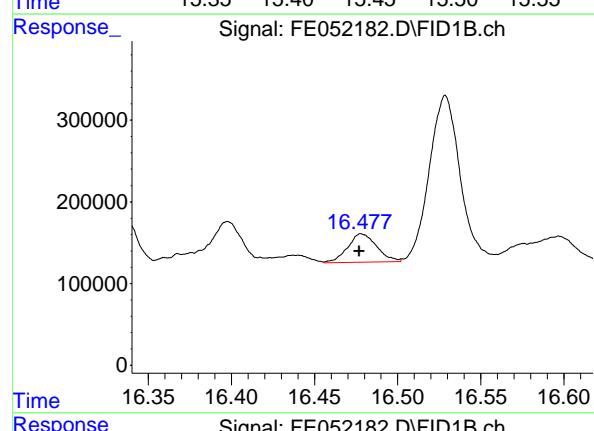
## #9 TETRACOSANE-d50 (SURROGATE)

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



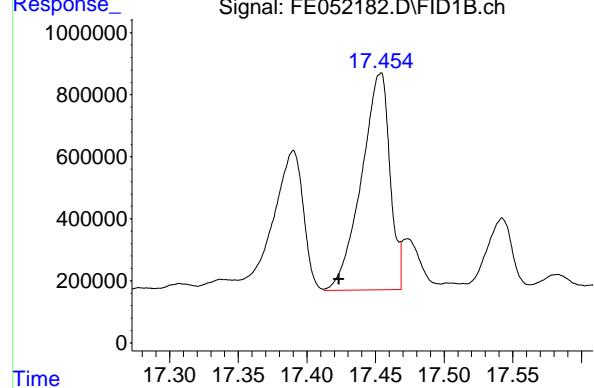
## #10 N-TETRACOSANE

R.T.: 15.453 min  
Delta R.T.: -0.008 min  
Instrument: FID\_E  
Response: 606157  
Conc: 5.48 ug/ml  
ClientSampleId : JPP-5.3-013025MSD



## #11 N-HEXACOSANE

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



## #12 N-OCTACOSANE

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

## rteres

## Area Percent Report

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

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID\_E\methods\FE012325.M  
 Title :

Signal : FID1B.ch

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

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37	6. 049	6. 019	6. 070	HH	281	3753	0. 01%	0. 001%	
38	6. 088	6. 070	6. 099	PH	1197	11154	0. 04%	0. 003%	
39	6. 115	6. 099	6. 166	HH	7713	84996	0. 33%	0. 020%	
40	6. 171	6. 166	6. 191	HH	269	3442	0. 01%	0. 001%	
41	6. 207	6. 191	6. 222	HH	590	6669	0. 03%	0. 002%	
42	6. 230	6. 222	6. 263	HH	276	5129	0. 02%	0. 001%	
43	6. 275	6. 263	6. 283	HH	407	3400	0. 01%	0. 001%	
44	6. 296	6. 283	6. 317	HH	853	11422	0. 04%	0. 003%	
45	6. 326	6. 317	6. 346	HH	689	8709	0. 03%	0. 002%	
46	6. 351	6. 346	6. 357	HH	474	2237	0. 01%	0. 001%	
47	6. 396	6. 357	6. 428	HH	1701	31398	0. 12%	0. 007%	
48	6. 446	6. 428	6. 463	HH	1140	13061	0. 05%	0. 003%	
49	6. 495	6. 463	6. 499	HH	573	8752	0. 03%	0. 002%	
50	6. 505	6. 499	6. 529	HH	702	10125	0. 04%	0. 002%	
51	6. 537	6. 529	6. 557	HH	749	9300	0. 04%	0. 002%	
52	6. 569	6. 557	6. 593	HH	670	9911	0. 04%	0. 002%	
53	6. 617	6. 593	6. 630	HH	1082	16719	0. 06%	0. 004%	
54	6. 643	6. 630	6. 649	HH	1150	11642	0. 05%	0. 003%	
55	6. 675	6. 649	6. 707	HH	27912	280664	1. 09%	0. 065%	
56	6. 723	6. 707	6. 741	HH	1759	21715	0. 08%	0. 005%	
57	6. 751	6. 741	6. 772	HH	647	9897	0. 04%	0. 002%	
58	6. 775	6. 772	6. 783	HH	548	3808	0. 01%	0. 001%	
59	6. 800	6. 783	6. 831	HH	2083	33730	0. 13%	0. 008%	
60	6. 848	6. 831	6. 878	HH	1062	22723	0. 09%	0. 005%	
61	6. 891	6. 878	6. 916	HH	1033	17883	0. 07%	0. 004%	
62	6. 943	6. 916	6. 963	HH	2388	35414	0. 14%	0. 008%	
63	6. 967	6. 963	6. 979	HH	794	7647	0. 03%	0. 002%	
64	6. 992	6. 979	7. 006	HH	885	12622	0. 05%	0. 003%	
65	7. 033	7. 006	7. 045	HH	874	16747	0. 07%	0. 004%	
66	7. 055	7. 045	7. 071	HH	909	12014	0. 05%	0. 003%	
67	7. 099	7. 071	7. 149	HH	195327	1829876	7. 11%	0. 422%	
68	7. 168	7. 149	7. 206	HH	3292	4944	0. 19%	0. 012%	
69	7. 226	7. 206	7. 236	HH	1172	17426	0. 07%	0. 004%	
70	7. 246	7. 236	7. 273	HH	1507	24367	0. 09%	0. 006%	
71	7. 312	7. 273	7. 353	HH	1210	40355	0. 16%	0. 009%	
72	7. 361	7. 353	7. 367	HH	737	5779	0. 02%	0. 001%	
73	7. 397	7. 367	7. 422	HH	1761	37243	0. 14%	0. 009%	
74	7. 439	7. 422	7. 475	HH	1854	35288	0. 14%	0. 008%	
75	7. 492	7. 475	7. 507	HH	999	16430	0. 06%	0. 004%	
76	7. 522	7. 507	7. 541	HH	2087	29176	0. 11%	0. 007%	
77	7. 561	7. 541	7. 577	HH	1953	28948	0. 11%	0. 007%	
78	7. 591	7. 577	7. 607	HH	1441	23286	0. 09%	0. 005%	
79	7. 635	7. 607	7. 646	HH	1673	33686	0. 13%	0. 008%	
80	7. 656	7. 646	7. 671	HH	1838	24582	0. 10%	0. 006%	
81	7. 686	7. 671	7. 714	HH	1852	38381	0. 15%	0. 009%	
82	7. 751	7. 714	7. 777	HH	33425	357192	1. 39%	0. 082%	
83	7. 808	7. 777	7. 834	HH	2264	63315	0. 25%	0. 015%	
84	7. 843	7. 834	7. 866	HH	2062	32099	0. 12%	0. 007%	
85	7. 888	7. 866	7. 921	HH	31037	323911	1. 26%	0. 075%	
86	7. 931	7. 921	7. 949	HH	1851	27058	0. 11%	0. 006%	
87	7. 966	7. 949	7. 972	HH	1481	18469	0. 07%	0. 004%	
88	7. 980	7. 972	7. 992	HH	1508	16054	0. 06%	0. 004%	
89	8. 030	7. 992	8. 077	HH	4513	108068	0. 42%	0. 025%	

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90	8. 114	8. 077	8. 127	HH	1929	53655	0. 21%	0. 012%	
91	8. 136	8. 127	8. 172	HH	1785	40969	0. 16%	0. 009%	
92	8. 187	8. 172	8. 199	HH	1651	24464	0. 10%	0. 006%	
93	8. 224	8. 199	8. 234	HH	2133	38563	0. 15%	0. 009%	
94	8. 247	8. 234	8. 306	HH	2180	71080	0. 28%	0. 016%	
95	8. 333	8. 306	8. 339	HH	1971	32353	0. 13%	0. 007%	
96	8. 349	8. 339	8. 377	HH	1885	41343	0. 16%	0. 010%	
97	8. 380	8. 377	8. 392	HH	1756	14806	0. 06%	0. 003%	
98	8. 399	8. 392	8. 412	HH	1598	17618	0. 07%	0. 004%	
99	8. 435	8. 412	8. 451	HH	2293	46996	0. 18%	0. 011%	
100	8. 475	8. 451	8. 502	HH	19135	232136	0. 90%	0. 054%	
101	8. 508	8. 502	8. 540	HH	2684	52401	0. 20%	0. 012%	
102	8. 557	8. 540	8. 569	HH	2616	41208	0. 16%	0. 010%	
103	8. 581	8. 569	8. 587	HH	2496	24497	0. 10%	0. 006%	
104	8. 597	8. 587	8. 612	HH	2838	39589	0. 15%	0. 009%	
105	8. 634	8. 612	8. 670	HH	17144	254646	0. 99%	0. 059%	
106	8. 681	8. 670	8. 700	HH	3573	54078	0. 21%	0. 012%	
107	8. 732	8. 700	8. 740	HH	20635	236624	0. 92%	0. 055%	
108	8. 747	8. 740	8. 771	HH	19262	200082	0. 78%	0. 046%	
109	8. 774	8. 771	8. 779	HH	2966	14358	0. 06%	0. 003%	
110	8. 801	8. 779	8. 822	HH	4589	90677	0. 35%	0. 021%	
111	8. 852	8. 822	8. 867	HH	43834	481351	1. 87%	0. 111%	
112	8. 901	8. 867	8. 925	HH	204728	2278125	8. 86%	0. 525%	
113	8. 933	8. 925	8. 950	HH	4659	62080	0. 24%	0. 014%	
114	8. 968	8. 950	8. 984	HH	5323	83767	0. 33%	0. 019%	
115	9. 015	8. 984	9. 070	HH	19249	519411	2. 02%	0. 120%	
116	9. 085	9. 070	9. 110	HH	4976	100032	0. 39%	0. 023%	
117	9. 128	9. 110	9. 157	HH	12859	188583	0. 73%	0. 043%	
118	9. 169	9. 157	9. 186	HH	4763	70785	0. 28%	0. 016%	
119	9. 200	9. 186	9. 222	HH	3609	72839	0. 28%	0. 017%	
120	9. 235	9. 222	9. 242	HH	3163	37822	0. 15%	0. 009%	
121	9. 284	9. 242	9. 307	HH	13173	225355	0. 88%	0. 052%	
122	9. 336	9. 307	9. 357	HH	282381	2783724	10. 82%	0. 642%	
123	9. 369	9. 357	9. 417	HH	21121	331067	1. 29%	0. 076%	
124	9. 439	9. 417	9. 460	HH	12582	203635	0. 79%	0. 047%	
125	9. 477	9. 460	9. 506	HH	8415	177594	0. 69%	0. 041%	
126	9. 519	9. 506	9. 527	HH	5796	66856	0. 26%	0. 015%	
127	9. 539	9. 527	9. 546	HH	6142	68203	0. 27%	0. 016%	
128	9. 571	9. 546	9. 586	HH	30337	429889	1. 67%	0. 099%	
129	9. 605	9. 586	9. 627	HH	160395	1598935	6. 22%	0. 369%	
130	9. 638	9. 627	9. 666	HH	9423	163246	0. 63%	0. 038%	
131	9. 690	9. 666	9. 704	HH	10069	163932	0. 64%	0. 038%	
132	9. 736	9. 704	9. 754	HH	18994	332318	1. 29%	0. 077%	
133	9. 778	9. 754	9. 799	HH	22374	311271	1. 21%	0. 072%	
134	9. 805	9. 799	9. 825	HH	5858	80170	0. 31%	0. 018%	
135	9. 838	9. 825	9. 857	HH	5049	84905	0. 33%	0. 020%	
136	9. 893	9. 857	9. 910	HH	21337	329333	1. 28%	0. 076%	
137	9. 925	9. 910	9. 957	HH	20288	282702	1. 10%	0. 065%	
138	9. 982	9. 957	9. 993	HH	6056	121078	0. 47%	0. 028%	
139	10. 030	9. 993	10. 051	HH	22894	415425	1. 61%	0. 096%	
140	10. 069	10. 051	10. 078	HH	8674	120468	0. 47%	0. 028%	
141	10. 086	10. 078	10. 091	HH	8581	64469	0. 25%	0. 015%	

rteres									
142	10. 117	10. 091	10. 156	HH	269344	2853100	11. 09%	0. 658%	
143	10. 195	10. 156	10. 218	HH	25628	533642	2. 07%	0. 123%	
144	10. 234	10. 218	10. 247	HH	24769	291950	1. 13%	0. 067%	
145	10. 267	10. 247	10. 302	HH	60465	908183	3. 53%	0. 209%	
146	10. 327	10. 302	10. 361	HH	40338	627401	2. 44%	0. 145%	
147	10. 382	10. 361	10. 408	HH	85642	951741	3. 70%	0. 220%	
148	10. 433	10. 408	10. 458	HH	71141	879548	3. 42%	0. 203%	
149	10. 491	10. 458	10. 513	HH	204738	2311399	8. 98%	0. 533%	
150	10. 533	10. 513	10. 578	HH	90373	1348112	5. 24%	0. 311%	
151	10. 597	10. 578	10. 615	HH	22361	332482	1. 29%	0. 077%	
152	10. 625	10. 615	10. 647	HH	11850	179774	0. 70%	0. 041%	
153	10. 693	10. 647	10. 719	HH	11486	399195	1. 55%	0. 092%	
154	10. 731	10. 719	10. 763	HH	9808	194620	0. 76%	0. 045%	
155	10. 795	10. 763	10. 807	HH	7944	184925	0. 72%	0. 043%	
156	10. 815	10. 807	10. 827	HH	7990	90970	0. 35%	0. 021%	
157	10. 850	10. 827	10. 873	HH	15469	295287	1. 15%	0. 068%	
158	10. 881	10. 873	10. 891	HH	9631	99652	0. 39%	0. 023%	
159	10. 907	10. 891	10. 920	HH	15526	219361	0. 85%	0. 051%	
160	10. 927	10. 920	10. 939	HH	11907	123058	0. 48%	0. 028%	
161	10. 958	10. 939	10. 971	HH	24323	336088	1. 31%	0. 078%	
162	10. 992	10. 971	11. 013	HH	57198	823770	3. 20%	0. 190%	
163	11. 032	11. 013	11. 062	HH	35872	526935	2. 05%	0. 122%	
164	11. 107	11. 062	11. 125	HH	39702	745386	2. 90%	0. 172%	
165	11. 131	11. 125	11. 144	HH	21202	220167	0. 86%	0. 051%	
166	11. 164	11. 144	11. 198	HH	75028	1104081	4. 29%	0. 255%	
167	11. 204	11. 198	11. 211	HH	13725	107951	0. 42%	0. 025%	
168	11. 227	11. 211	11. 236	HH	18664	241504	0. 94%	0. 056%	
169	11. 244	11. 236	11. 254	HH	17216	173822	0. 68%	0. 040%	
170	11. 276	11. 254	11. 289	HH	42931	613220	2. 38%	0. 141%	
171	11. 318	11. 289	11. 337	HH	109704	1877245	7. 30%	0. 433%	
172	11. 341	11. 337	11. 360	HH	27695	291626	1. 13%	0. 067%	
173	11. 383	11. 360	11. 392	HH	17391	306122	1. 19%	0. 071%	
174	11. 413	11. 392	11. 432	HH	33250	542369	2. 11%	0. 125%	
175	11. 446	11. 432	11. 468	HH	20743	375740	1. 46%	0. 087%	
176	11. 488	11. 468	11. 494	HH	34930	421136	1. 64%	0. 097%	
177	11. 534	11. 494	11. 566	HH	1854896	24234629	94. 20%	5. 590%	
178	11. 598	11. 566	11. 649	HH	627392	7234087	28. 12%	1. 669%	
179	11. 673	11. 649	11. 707	HH	21530	582779	2. 27%	0. 134%	
180	11. 719	11. 707	11. 738	HH	16675	283272	1. 10%	0. 065%	
181	11. 757	11. 738	11. 772	HH	26671	393933	1. 53%	0. 091%	
182	11. 793	11. 772	11. 836	HH	136576	1819554	7. 07%	0. 420%	
183	11. 869	11. 836	11. 883	HH	18526	439532	1. 71%	0. 101%	
184	11. 923	11. 883	11. 956	HH	216088	2927931	11. 38%	0. 675%	
185	11. 982	11. 956	11. 987	HH	21437	340798	1. 32%	0. 079%	
186	12. 036	11. 987	12. 078	HH	63527	1722594	6. 70%	0. 397%	
187	12. 100	12. 078	12. 129	HH	34319	718872	2. 79%	0. 166%	
188	12. 161	12. 129	12. 182	HH	35068	747361	2. 91%	0. 172%	
189	12. 201	12. 182	12. 224	HH	25844	536232	2. 08%	0. 124%	
190	12. 238	12. 224	12. 248	HH	20155	278853	1. 08%	0. 064%	
191	12. 263	12. 248	12. 279	HH	25128	390833	1. 52%	0. 090%	
192	12. 312	12. 279	12. 327	HH	170981	2205307	8. 57%	0. 509%	
193	12. 344	12. 327	12. 372	HH	242731	2815489	10. 94%	0. 649%	
194	12. 379	12. 372	12. 387	HH	17741	154093	0. 60%	0. 036%	

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195	12. 410	12. 387	12. 418	HH	122127	1345693	5. 23%	0. 310%	
196	12. 432	12. 418	12. 448	HH	244386	2666770	10. 37%	0. 615%	
197	12. 461	12. 448	12. 473	HH	102327	1186075	4. 61%	0. 274%	
198	12. 491	12. 473	12. 512	HH	149299	1935150	7. 52%	0. 446%	
199	12. 525	12. 512	12. 541	HH	27463	393627	1. 53%	0. 091%	
200	12. 563	12. 541	12. 577	HH	37170	631097	2. 45%	0. 146%	
201	12. 585	12. 577	12. 606	HH	30473	459018	1. 78%	0. 106%	
202	12. 626	12. 606	12. 646	HH	28321	571994	2. 22%	0. 132%	
203	12. 673	12. 646	12. 694	HH	111642	1606000	6. 24%	0. 370%	
204	12. 700	12. 694	12. 710	HH	26200	240757	0. 94%	0. 056%	
205	12. 718	12. 710	12. 746	HH	25895	518004	2. 01%	0. 119%	
206	12. 773	12. 746	12. 794	HH	160953	2043323	7. 94%	0. 471%	
207	12. 808	12. 794	12. 817	HH	32600	419531	1. 63%	0. 097%	
208	12. 834	12. 817	12. 857	HH	68053	1000058	3. 89%	0. 231%	
209	12. 871	12. 857	12. 878	HH	24283	287112	1. 12%	0. 066%	
210	12. 883	12. 878	12. 901	HH	24226	320794	1. 25%	0. 074%	
211	12. 921	12. 901	12. 942	HH	38868	729870	2. 84%	0. 168%	
212	12. 959	12. 942	12. 991	HH	31470	771316	3. 00%	0. 178%	
213	13. 023	12. 991	13. 036	HH	44467	888894	3. 46%	0. 205%	
214	13. 047	13. 036	13. 075	HH	38897	723698	2. 81%	0. 167%	
215	13. 094	13. 075	13. 107	HH	58963	824229	3. 20%	0. 190%	
216	13. 112	13. 107	13. 136	HH	44717	597853	2. 32%	0. 138%	
217	13. 170	13. 136	13. 190	HH	95699	1700201	6. 61%	0. 392%	
218	13. 225	13. 190	13. 254	HH	235213	4237559	16. 47%	0. 977%	
219	13. 261	13. 254	13. 301	HH	53228	1340248	5. 21%	0. 309%	
220	13. 351	13. 301	13. 377	HH	1726104	25726613	100. 00%	5. 934%	
221	13. 393	13. 377	13. 410	HH	50311	728368	2. 83%	0. 168%	
222	13. 423	13. 410	13. 438	HH	31370	491104	1. 91%	0. 113%	
223	13. 479	13. 438	13. 493	HH	58023	1410087	5. 48%	0. 325%	
224	13. 515	13. 493	13. 530	HH	106112	1629013	6. 33%	0. 376%	
225	13. 538	13. 530	13. 572	HH	66697	1297579	5. 04%	0. 299%	
226	13. 583	13. 572	13. 602	HH	38217	597090	2. 32%	0. 138%	
227	13. 649	13. 602	13. 665	HH	1514485	21271547	82. 68%	4. 906%	
228	13. 683	13. 665	13. 697	HH	247362	2822055	10. 97%	0. 651%	
229	13. 711	13. 697	13. 744	HH	229451	3155153	12. 26%	0. 728%	
230	13. 764	13. 744	13. 774	HH	35490	610937	2. 37%	0. 141%	
231	13. 795	13. 774	13. 809	HH	88733	1261339	4. 90%	0. 291%	
232	13. 829	13. 809	13. 860	HH	116313	1963987	7. 63%	0. 453%	
233	13. 887	13. 860	13. 912	HH	132563	2100590	8. 17%	0. 485%	
234	13. 961	13. 912	13. 983	HH	68736	1971712	7. 66%	0. 455%	
235	14. 016	13. 983	14. 055	HH	86696	2261974	8. 79%	0. 522%	
236	14. 080	14. 055	14. 105	HH	124364	2234525	8. 69%	0. 515%	
237	14. 116	14. 105	14. 136	HH	37234	643534	2. 50%	0. 148%	
238	14. 212	14. 136	14. 251	HH	271342	6040221	23. 48%	1. 393%	
239	14. 271	14. 251	14. 290	HH	58181	1129827	4. 39%	0. 261%	
240	14. 317	14. 290	14. 340	HH	201909	3185407	12. 38%	0. 735%	
241	14. 360	14. 340	14. 381	HH	145606	2202100	8. 56%	0. 508%	
242	14. 414	14. 381	14. 434	HH	229962	4119058	16. 01%	0. 950%	
243	14. 446	14. 434	14. 452	HH	76481	786388	3. 06%	0. 181%	
244	14. 463	14. 452	14. 473	HH	86015	1004351	3. 90%	0. 232%	
245	14. 488	14. 473	14. 508	HH	126433	1907521	7. 41%	0. 440%	
246	14. 528	14. 508	14. 562	HH	128079	2379712	9. 25%	0. 549%	

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247	14. 599	14. 562	14. 616	HH	81637	1947606	7. 57%	0. 449%	
248	14. 642	14. 616	14. 661	HH	60314	1486095	5. 78%	0. 343%	
249	14. 676	14. 661	14. 688	HH	53579	840865	3. 27%	0. 194%	
250	14. 705	14. 688	14. 722	HH	60062	1100899	4. 28%	0. 254%	
251	14. 733	14. 722	14. 742	HH	50776	595305	2. 31%	0. 137%	
252	14. 758	14. 742	14. 777	HH	50940	1012217	3. 93%	0. 233%	
253	14. 792	14. 777	14. 826	HH	51562	1398943	5. 44%	0. 323%	
254	14. 841	14. 826	14. 856	HH	47294	824331	3. 20%	0. 190%	
255	14. 880	14. 856	14. 891	HH	75083	1320727	5. 13%	0. 305%	
256	14. 907	14. 891	14. 926	HH	86243	1576745	6. 13%	0. 364%	
257	14. 944	14. 926	14. 965	HH	122928	2044867	7. 95%	0. 472%	
258	14. 975	14. 965	14. 990	HH	60149	863384	3. 36%	0. 199%	
259	15. 004	14. 990	15. 010	HH	63920	765753	2. 98%	0. 177%	
260	15. 044	15. 010	15. 090	HH	75276	2985781	11. 61%	0. 689%	
261	15. 121	15. 090	15. 158	HH	158132	3812210	14. 82%	0. 879%	
262	15. 184	15. 158	15. 208	HH	221266	4307309	16. 74%	0. 993%	
263	15. 225	15. 208	15. 234	HH	126069	1667769	6. 48%	0. 385%	
264	15. 248	15. 234	15. 278	HH	155087	2595442	10. 09%	0. 599%	
265	15. 308	15. 278	15. 332	HH	152432	3094902	12. 03%	0. 714%	
266	15. 369	15. 332	15. 405	HH	107842	3391374	13. 18%	0. 782%	
267	15. 411	15. 405	15. 422	HH	57551	593350	2. 31%	0. 137%	
268	15. 453	15. 422	15. 469	HH	102250	2161994	8. 40%	0. 499%	
269	15. 506	15. 469	15. 526	HH	875199	14107844	54. 84%	3. 254%	
270	15. 551	15. 526	15. 572	HH	785666	10312423	40. 08%	2. 379%	
271	15. 582	15. 572	15. 607	HH	72579	1468712	5. 71%	0. 339%	
272	15. 665	15. 607	15. 698	HH	270199	6275198	24. 39%	1. 447%	
273	15. 731	15. 698	15. 768	HH	132128	3653861	14. 20%	0. 843%	
274	15. 792	15. 768	15. 818	HH	136478	2874277	11. 17%	0. 663%	
275	15. 840	15. 818	15. 875	HH	123660	3583292	13. 93%	0. 827%	
276	15. 888	15. 875	15. 909	HH	101308	1804501	7. 01%	0. 416%	
277	15. 936	15. 909	15. 960	HH	96520	2648084	10. 29%	0. 611%	
278	15. 978	15. 960	15. 997	HH	89467	1779194	6. 92%	0. 410%	
279	16. 055	15. 997	16. 092	HH	93664	4671732	18. 16%	1. 078%	
280	16. 119	16. 092	16. 141	HH	109667	2805446	10. 90%	0. 647%	
281	16. 164	16. 141	16. 184	HH	208403	35271108	13. 71%	0. 814%	
282	16. 201	16. 184	16. 235	HH	140728	3284679	12. 77%	0. 758%	
283	16. 254	16. 235	16. 287	HH	127008	3146095	12. 23%	0. 726%	
284	16. 314	16. 287	16. 325	HH	176196	3228850	12. 55%	0. 745%	
285	16. 329	16. 325	16. 354	HH	165939	2279083	8. 86%	0. 526%	
286	16. 398	16. 354	16. 421	HH	133003	4078404	15. 85%	0. 941%	
287	16. 438	16. 421	16. 456	HH	91662	1864216	7. 25%	0. 430%	
288	16. 478	16. 456	16. 501	HH	117918	2691508	10. 46%	0. 621%	
289	16. 529	16. 501	16. 559	HH	287496	5534246	21. 51%	1. 276%	
290	16. 597	16. 559	16. 621	HH	115180	3830310	14. 89%	0. 883%	
291	16. 642	16. 621	16. 650	HH	92462	1564425	6. 08%	0. 361%	
292	16. 659	16. 650	16. 675	HH	94618	1401571	5. 45%	0. 323%	
293	16. 691	16. 675	16. 704	HH	94725	1612215	6. 27%	0. 372%	
294	16. 717	16. 704	16. 725	HH	94087	1156714	4. 50%	0. 267%	
295	16. 754	16. 725	16. 776	HH	112338	3154920	12. 26%	0. 728%	
296	16. 795	16. 776	16. 813	HH	114923	2351406	9. 14%	0. 542%	
297	16. 839	16. 813	16. 878	HH	142682	4539375	17. 64%	1. 047%	
298	16. 907	16. 878	16. 933	HH	115775	3567350	13. 87%	0. 823%	
299	16. 962	16. 933	16. 984	HH	148582	3878410	15. 08%	0. 895%	

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300	17. 006	16. 984	17. 022	HH	128521	2733705	10. 63%	0. 631%	
301	17. 070	17. 022	17. 085	HH	787244	15737693	61. 17%	3. 630%	
302	17. 093	17. 085	17. 120	HH	519694	6029801	23. 44%	1. 391%	
303	17. 134	17. 120	17. 147	HH	119684	1886059	7. 33%	0. 435%	
304	17. 188	17. 147	17. 207	HH	280539	6330112	24. 61%	1. 460%	
305	17. 217	17. 207	17. 235	HH	146304	2251555	8. 75%	0. 519%	
306	17. 247	17. 235	17. 267	HH	133467	2532480	9. 84%	0. 584%	
307	17. 278	17. 267	17. 290	HH	135018	1793902	6. 97%	0. 414%	
308	17. 307	17. 290	17. 320	HH	148777	2587042	10. 06%	0. 597%	
309	17. 338	17. 320	17. 350	HH	161353	2743570	10. 66%	0. 633%	
310	17. 390	17. 350	17. 413	HH	576614	11657904	45. 31%	2. 689%	
311	17. 454	17. 413	17. 461	HHA	826826	12839561	49. 91%	2. 961%	
					Sum of corrected areas:	433549302			

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

## Manual Integration Report

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



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

### Manual Integration Report

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

### Manual Integration Report

Sample ID	ClientID ID	File ID	Sequence ID	Parameter	Supervised By	Supervised On	Reason
Q1232-01		FG015275.D	FG013125	TETRACOSANE-d50 (SURROGA	Ankita	2/3/2025 1:06:45 PM	Peak Integrated by Software incorrectly
50 PPM TRPH STD		FG015283.D	FG013125	N-HEXACOSANE	Ankita	2/3/2025 1:06:46 PM	Peak Integrated by Software incorrectly
50 PPM TRPH STD		FG015283.D	FG013125	N-OCTACOSANE	Ankita	2/3/2025 1:06:46 PM	Peak Integrated by Software incorrectly
50 PPM TRPH STD		FG015292.D	FG013125	N-OCTACOSANE	Ankita	2/3/2025 1:06:47 PM	Peak Integrated by Software incorrectly



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

Instrument ID: FID\_E

**Daily Analysis Runlog For Sequence/QCBatch ID # FE012325**

Review By	yogesh	Review On	1/23/2025 3:09:47 PM
Supervise By	sohil	Supervise On	1/24/2025 2:02:13 PM
SubDirectory	FE012325	HP Acquire Method	HP Processing Method FE012325
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP23961,PP23963,PP23964,PP23965,PP23966		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP23963 PP23962,PP23967		

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

M : Manual Integration

Instrument ID: FID\_E

**Daily Analysis Runlog For Sequence/QCBatch ID # FE013125**

Review By	yogesh	Review On	1/31/2025 12:39:58 PM
Supervise By	Ankita	Supervise On	2/3/2025 1:08:07 PM
SubDirectory	FE013125	HP Acquire Method	HP Processing Method FE012325
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP23961,PP23963,PP23964,PP23965,PP23966		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP23963 PP23962,PP23967		

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

Instrument ID: FID\_E

**Daily Analysis Runlog For Sequence/QCBatch ID # FE013125**

Review By	yogesh	Review On	1/31/2025 12:39:58 PM
Supervise By	Ankita	Supervise On	2/3/2025 1:08:07 PM
SubDirectory	FE013125	HP Acquire Method	HP Processing Method FE012325
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP23961,PP23963,PP23964,PP23965,PP23966		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP23963 PP23962,PP23967		

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

M : Manual Integration



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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 Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP23963 PP23962,PP23967		

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

Instrument ID: FID\_G

**Daily Analysis Runlog For Sequence/QCBatch ID # FG013125**

Review By	yogesh	Review On	1/31/2025 9:26:31 AM
Supervise By	Ankita	Supervise On	2/3/2025 1:06:52 PM
SubDirectory	FG013125	HP Acquire Method	HP Processing Method FG011325
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP23961,PP23963,PP23964,PP23965,PP23966		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP23963 PP23962,PP23967		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FG015271.D	31 Jan 2025 07:43	YP\AJ	Ok
2	I.BLK	FG015272.D	31 Jan 2025 11:03	YP\AJ	Ok
3	50 PPM TRPH STD	FG015273.D	31 Jan 2025 11:32	YP\AJ	Ok
4	RT MARKER	FG015274.D	31 Jan 2025 12:00	YP\AJ	Ok
5	Q1232-01	FG015275.D	31 Jan 2025 12:29	YP\AJ	Dilution
6	Q1232-05	FG015276.D	31 Jan 2025 12:57	YP\AJ	Dilution
7	Q1232-09	FG015277.D	31 Jan 2025 13:26	YP\AJ	Dilution
8	Q1232-13	FG015278.D	31 Jan 2025 13:54	YP\AJ	Dilution
9	Q1232-17	FG015279.D	31 Jan 2025 14:23	YP\AJ	Dilution
10	Q1235-01	FG015280.D	31 Jan 2025 14:51	YP\AJ	Dilution
11	Q1235-05	FG015281.D	31 Jan 2025 15:20	YP\AJ	Dilution
12	I.BLK	FG015282.D	31 Jan 2025 15:48	YP\AJ	Ok
13	50 PPM TRPH STD	FG015283.D	31 Jan 2025 16:17	YP\AJ	Ok,M
14	Q1232-01	FG015284.D	31 Jan 2025 18:11	YP\AJ	Ok
15	Q1232-05	FG015285.D	31 Jan 2025 18:39	YP\AJ	Ok
16	Q1232-09	FG015286.D	31 Jan 2025 19:08	YP\AJ	Ok
17	Q1232-13	FG015287.D	31 Jan 2025 19:36	YP\AJ	Ok
18	Q1232-17	FG015288.D	31 Jan 2025 20:05	YP\AJ	Ok
19	Q1235-01	FG015289.D	31 Jan 2025 20:33	YP\AJ	Ok
20	Q1235-05	FG015290.D	31 Jan 2025 21:02	YP\AJ	Ok
21	I.BLK	FG015291.D	31 Jan 2025 21:30	YP\AJ	Ok

Instrument ID: FID\_G

**Daily Analysis Runlog For Sequence/QCBatch ID # FG013125**

Review By	yogesh	Review On	1/31/2025 9:26:31 AM
Supervise By	Ankita	Supervise On	2/3/2025 1:06:52 PM
SubDirectory	FG013125	HP Acquire Method	HP Processing Method FG011325
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP23961,PP23963,PP23964,PP23965,PP23966		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP23963 PP23962,PP23967		

22	50 PPM TRPH STD	FG015292.D	31 Jan 2025 22:27	YP\AJ	Ok,M
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M : Manual Integration



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Instrument ID: FID\_E

**Daily Analysis Runlog For Sequence/QCBatch ID # FE012325**

Review By	yogesh	Review On	1/23/2025 3:09:47 PM
Supervise By	sohil	Supervise On	1/24/2025 2:02:13 PM
SubDirectory	FE012325	HP Acquire Method	HP Processing Method FE012325
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP23961,PP23963,PP23964,PP23965,PP23966		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP23963 PP23962,PP23967		

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

M : Manual Integration



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Instrument ID: FID\_E

**Daily Analysis Runlog For Sequence/QCBatch ID # FE013125**

Review By	yogesh	Review On	1/31/2025 12:39:58 PM
Supervise By	Ankita	Supervise On	2/3/2025 1:08:07 PM
SubDirectory	FE013125	HP Acquire Method	HP Processing Method FE012325
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP23961,PP23963,PP23964,PP23965,PP23966		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP23963 PP23962,PP23967		

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

Instrument ID: FID\_E

**Daily Analysis Runlog For Sequence/QCBatch ID # FE013125**

Review By	yogesh	Review On	1/31/2025 12:39:58 PM
Supervise By	Ankita	Supervise On	2/3/2025 1:08:07 PM
SubDirectory	FE013125	HP Acquire Method	HP Processing Method FE012325
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP23961,PP23963,PP23964,PP23965,PP23966		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP23963 PP23962,PP23967		

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

M : Manual Integration



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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 Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP23963 PP23962,PP23967		

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



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Instrument ID: FID\_G

**Daily Analysis Runlog For Sequence/QCBatch ID # FG013125**

Review By	yogesh	Review On	1/31/2025 9:26:31 AM
Supervise By	Ankita	Supervise On	2/3/2025 1:06:52 PM
SubDirectory	FG013125	HP Acquire Method	HP Processing Method FG011325
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP23961,PP23963,PP23964,PP23965,PP23966		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP23963 PP23962,PP23967		

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2		FG015271.D	31 Jan 2025 07:43		YPAJ	Ok
2	I.BLK		FG015272.D	31 Jan 2025 11:03		YPAJ	Ok
3	50 PPM TRPH STD		FG015273.D	31 Jan 2025 11:32		YPAJ	Ok
4	RT MARKER		FG015274.D	31 Jan 2025 12:00		YPAJ	Ok
5	Q1232-01		FG015275.D	31 Jan 2025 12:29	need 10x dilution	YPAJ	Dilution
6	Q1232-05		FG015276.D	31 Jan 2025 12:57	need 10x dilution	YPAJ	Dilution
7	Q1232-09		FG015277.D	31 Jan 2025 13:26	need 10x dilution	YPAJ	Dilution
8	Q1232-13		FG015278.D	31 Jan 2025 13:54	need 10x dilution	YPAJ	Dilution
9	Q1232-17		FG015279.D	31 Jan 2025 14:23	need 10x dilution	YPAJ	Dilution
10	Q1235-01		FG015280.D	31 Jan 2025 14:51	need 10x dilution	YPAJ	Dilution
11	Q1235-05		FG015281.D	31 Jan 2025 15:20	need 10x dilution	YPAJ	Dilution
12	I.BLK		FG015282.D	31 Jan 2025 15:48		YPAJ	Ok
13	50 PPM TRPH STD		FG015283.D	31 Jan 2025 16:17		YPAJ	Ok,M
14	Q1232-01		FG015284.D	31 Jan 2025 18:11		YPAJ	Ok
15	Q1232-05		FG015285.D	31 Jan 2025 18:39		YPAJ	Ok
16	Q1232-09		FG015286.D	31 Jan 2025 19:08		YPAJ	Ok
17	Q1232-13		FG015287.D	31 Jan 2025 19:36		YPAJ	Ok
18	Q1232-17		FG015288.D	31 Jan 2025 20:05		YPAJ	Ok



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Instrument ID: FID\_G

**Daily Analysis Runlog For Sequence/QCBatch ID # FG013125**

Review By	yogesh	Review On	1/31/2025 9:26:31 AM
Supervise By	Ankita	Supervise On	2/3/2025 1:06:52 PM
SubDirectory	FG013125	HP Acquire Method	HP Processing Method FG011325
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP23961,PP23963,PP23964,PP23965,PP23966		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP23963 PP23962,PP23967		

19	Q1235-01		FG015289.D	31 Jan 2025 20:33		YPAJ	Ok
20	Q1235-05		FG015290.D	31 Jan 2025 21:02		YPAJ	Ok
21	I.BLK		FG015291.D	31 Jan 2025 21:30		YPAJ	Ok
22	50 PPM TRPH STD		FG015292.D	31 Jan 2025 22:27		YPAJ	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 134WQ

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 15:20

Raw Sample Received by: SQ WEC

Raw Sample Relinquished by: CF 282

Date/Time 01/30/25 17:10

Raw Sample Received by:

Raw Sample Relinquished by: SQ WEC

## WORKLIST(Hardcopy Internal Chain)

JH 23448

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  
15120

Raw Sample Received by:

JH WLC

Raw Sample Relinquished by:

cf gm

Date/Time

01/30/25  
14110

Raw Sample Received by:

cf sn

Raw Sample Relinquished by:

JH WLC



## EXTRACTION LOGPAGE

PB166415

SOP ID:	M3541-ASE Extraction-14		
Clean Up SOP #:	N/A	Extraction Start Date :	01/31/2025
Matrix :	Solid	Extraction Start Time :	08:50
Weigh By:	EH	Extraction End Date :	01/31/2025
Balance check:	RJ	Extraction End Time :	11:50
Balance ID:	EX-SC-2	pH Meter ID:	N/A
pH Strip Lot#:	N/A	Hood ID:	3,7
Extraction Method:	<input type="checkbox"/> Separatory Funnel <input type="checkbox"/> Continous Liquid/Liquid <input type="checkbox"/> Sonication <input type="checkbox"/> Waste Dilution <input checked="" type="checkbox"/> Soxhlet		

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

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

## 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
01/31/25 11:55	RP (Fpt. Lab)	Y-P-Pest PCB
	Preparation Group	Analysis Group

**Analytical Method:** M3541-ASE Extraction-14

**Concentration Date:** 01/31/2025

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

WORKLIST(Hardcopy Internal Chain)

WorkList Name : Q1241

WorkList ID : 187331

Department : Extraction

Date : 01-31-2025 08:13:34

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

Date/Time

01/31/25 8:47

Raw Sample Received by:

RJ GPT (as)

Raw Sample Relinquished by:

AL SM

Date/Time

01/31/25

9:10

Raw Sample Received by:

CP SM

Raw Sample Relinquished by:

RJ GPT (as)



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

## Prep Standard - Chemical Standard Summary

**Order ID :** Q1232

**Test :** Diesel Range Organics

**Prepbatch ID :** PB166415,

**Sequence ID/Qc Batch ID:** FG013125,FE013125,

**Standard ID :**

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

**Chemical ID :**

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

## Extractions STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2017	1:1 ACETONE/METHYLENE CHLORIDE	<a href="#">EP2578</a>	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

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3923	Baked Sodium Sulfate	<a href="#">EP2580</a>	01/17/2025	07/01/2025	Rajesh Parikh	Extraction_SC ALE_2 (EX-SC-2)	None	RUPESHKUMAR SHAH 01/17/2025

FROM 4000.00000gram of E3551 = Final Quantity: 4000.000 gram



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## Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3609	20 PPM DRO SPIKE SOLUTION (RESTEK)	<a href="#">PP23913</a>	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

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

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



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## Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
433	100/100 PPM DRO (Restek)	<a href="#">PP23961</a>	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

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3796	100/100 PPM DRO STD (CPI)	<a href="#">PP23962</a>	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

## Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
435	50 PPM ICC DRO STD (Restek)	<a href="#">PP23963</a>	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

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
437	20 PPM ICC DRO STD (Restek)	<a href="#">PP23964</a>	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

## Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
438	10 PPM ICC DRO STD (Restek)	<a href="#">PP23965</a>	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

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

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



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Fax : 908 789 8922

## Pest/Pcb STANDARD PREPARATION LOG

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

FROM 0.80000ml of E3828 + 0.50000ml of PP23962 = Final Quantity: 1.000 ml



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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
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
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
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
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	24H2762008	06/26/2025	12/26/2024 / Rajesh	12/13/2024 / Rajesh	E3846
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)	25A0262002	07/30/2025	01/30/2025 / Rajesh	01/20/2025 / Rajesh	E3874
Restek	31266 / Florida TRPH Standard	A0186840	05/13/2025	11/13/2024 / yogesh	07/11/2022 / Yogesh	P11958
Restek	31266 / Florida TRPH Standard	A0186840	05/13/2025	11/13/2024 / yogesh	07/11/2022 / Yogesh	P11959
Restek	31266 / Florida TRPH Standard	A0204859	04/25/2025	10/25/2024 / yogesh	01/12/2024 / Yogesh	P13104
Restek	31266 / Florida TRPH Standard	A0204859	04/25/2025	10/25/2024 / yogesh	01/12/2024 / Yogesh	P13109
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
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
Absolute Standards, Inc.	72072 / n-Tetracosane-d50, 1000 ug/ml	101122	05/01/2025	11/01/2024 / yogesh	07/24/2024 / yogesh	P13492
Absolute Standards, Inc.	72072 / n-Tetracosane-d50, 1000 ug/ml	101122	05/01/2025	11/01/2024 / yogesh	07/24/2024 / yogesh	P13493
Absolute Standards, Inc.	72072 / n-Tetracosane-d50, 1000 ug/ml	101122	05/01/2025	11/01/2024 / yogesh	07/24/2024 / yogesh	P13494
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



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 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  
QUÍMICOS  
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 <sub>2</sub> SO <sub>4</sub>		
SPECIFICATION NUMBER :	6399	RELEASE DATE:	ABR/21/2023		
LOT NUMBER :	313201				
TEST	SPECIFICATIONS	LOT VALUES			
Assay (Na <sub>2</sub> SO <sub>4</sub> )	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 <sub>4</sub> )	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.

Recd. by R3 on 7/29/23 E 3551

RC-02-01, Ed. 3

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



Material No.: 9266-A4

Batch No.: 24I2662006

Manufactured Date: 2024-08-29

Expiration Date: 2025-11-28

Revision No.: 0

## Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	<= 5	2
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	<= 10	3
Assay (CH <sub>2</sub> Cl <sub>2</sub> ) (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

A handwritten signature in black ink that reads 'Jamie Croak'.

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)



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) (ng/mL)	Single Impurity Peak <= 5	2
ECD Sensitive Impurities (as HeptachlorEpoxide) (pg/mL)	Single Peak <= 10	1
Assay ( $\text{CH}_2\text{Cl}_2$ ) (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 ( $\mu\text{eq/g}$ )	<= 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

A handwritten signature of the name "Jamie Croak".

Jamie Croak  
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Acetone  
BAKER RESI-ANALYZED® Reagent  
For Organic Residue Analysis



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 <sub>3</sub> ) <sub>2</sub> CO) (by GC, corrected for water)	>= 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 <sub>2</sub> O)	<= 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

Rec'd by RP On 12/13/24

E 3846

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)



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 ( $\text{CH}_2\text{Cl}_2$ ) (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 ( $\mu\text{eq/g}$ )	<= 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 &amp; DC

E 3848

The image shows a handwritten signature of the name "Jamie Croak".  
 Jamie Croak  
 Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials,LLC

100 Matsonford Rd, Suite 200, Radnor, PA, 19087, U.S.A. Phone 610.386.1700

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



Material No.: 9266-A4

Batch No.: 25A0262002

Manufactured Date: 2024-11-21

Expiration Date: 2026-02-20

Revision No.: 0

## Certificate of Analysis

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

For Laboratory, Research, or Manufacturing Use

MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States

Packaging Site: Phillipsburg Mfg Ctr &amp; DC

E 3874

  
 Jamie Croak  
 Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials,LLC

100 Matsonford Rd, Suite 200, Radnor, PA, 19087, U.S.A. Phone 610.386.1700



# CERTIFIED REFERENCE MATERIAL

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

[www.restek.com](http://www.restek.com)



## Certificate of Analysis

### 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.:** A0186840

**Description :** Florida TRPH Standard

Florida TRPH Standard 500 $\mu$ g/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

P11968  
L  
P11962 } 7.8  
07/11/20

### C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	n-Octane (C8) <b>CAS #</b> 111-65-9 <b>Purity</b> 99%	505.0 $\mu$ g/mL	+/- 2.9995 $\mu$ g/mL	+/- 12.5465 $\mu$ g/mL	Gravimetric Unstressed Stressed
2	n-Decane (C10) <b>CAS #</b> 124-18-5 <b>Purity</b> 99%	503.0 $\mu$ g/mL	+/- 2.9877 $\mu$ g/mL	+/- 12.4968 $\mu$ g/mL	Gravimetric Unstressed Stressed
3	n-Dodecane (C12) <b>CAS #</b> 112-40-3 <b>Purity</b> 99%	503.5 $\mu$ g/mL	+/- 2.9906 $\mu$ g/mL	+/- 12.5092 $\mu$ g/mL	Gravimetric Unstressed Stressed
4	n-Tetradecane (C14) <b>CAS #</b> 629-59-4 <b>Purity</b> 99%	505.0 $\mu$ g/mL	+/- 2.9995 $\mu$ g/mL	+/- 12.5465 $\mu$ g/mL	Gravimetric Unstressed Stressed
5	n-Hexadecane (C16) <b>CAS #</b> 544-76-3 <b>Purity</b> 98%	504.7 $\mu$ g/mL	+/- 2.9978 $\mu$ g/mL	+/- 12.5390 $\mu$ g/mL	Gravimetric Unstressed Stressed
6	n-Octadecane (C18) <b>CAS #</b> 593-45-3 <b>Purity</b> 97%	504.4 $\mu$ g/mL	+/- 2.9960 $\mu$ g/mL	+/- 12.5316 $\mu$ g/mL	Gravimetric Unstressed Stressed
7	n-Eicosane (C20) <b>CAS #</b> 112-95-8 <b>Purity</b> 99%	503.5 $\mu$ g/mL	+/- 2.9906 $\mu$ g/mL	+/- 12.5092 $\mu$ g/mL	Gravimetric Unstressed Stressed

8	n-Docosane (C22) <b>CAS #</b> 629-97-0 <b>Purity</b> 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) <b>CAS #</b> 646-31-1 <b>Purity</b> 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) <b>CAS #</b> 630-01-3 <b>Purity</b> 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) <b>CAS #</b> 630-02-4 <b>Purity</b> 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) <b>CAS #</b> 638-68-6 <b>Purity</b> 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) <b>CAS #</b> 544-85-4 <b>Purity</b> 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) <b>CAS #</b> 14167-59-0 <b>Purity</b> 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) <b>CAS #</b> 630-06-8 <b>Purity</b> 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) <b>CAS #</b> 7194-85-6 <b>Purity</b> 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) <b>CAS #</b> 4181-95-7 <b>Purity</b> 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 0.25 $\mu$ m  
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:**

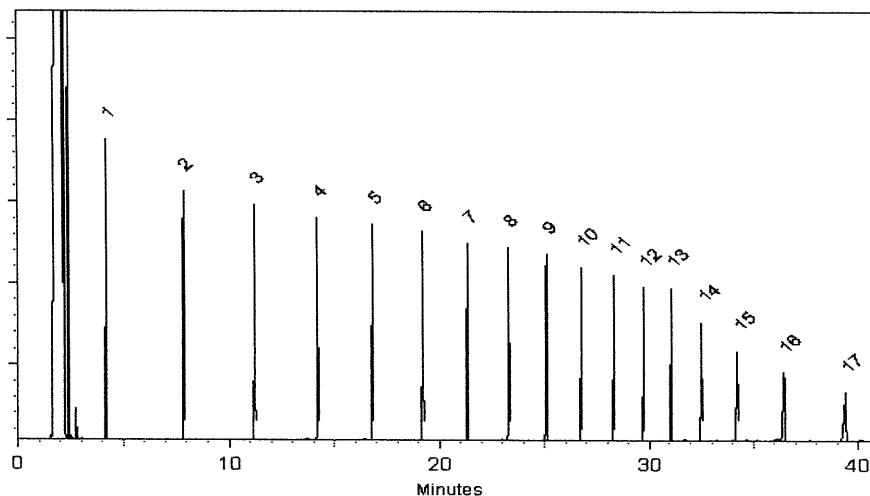
250°C

**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*  
Brittany Federinko - Operations Tech I

Date Mixed: 29-Jun-2022 Balance: 1128360905

*Christie Mills*  
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/ $\mu$ ECD, 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:

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

*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](http://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](http://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.



# CERTIFIED REFERENCE MATERIAL

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

[www.restek.com](http://www.restek.com)



## Certificate of Analysis

### 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.:** A0186840

**Description :** Florida TRPH Standard

Florida TRPH Standard 500 $\mu$ g/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

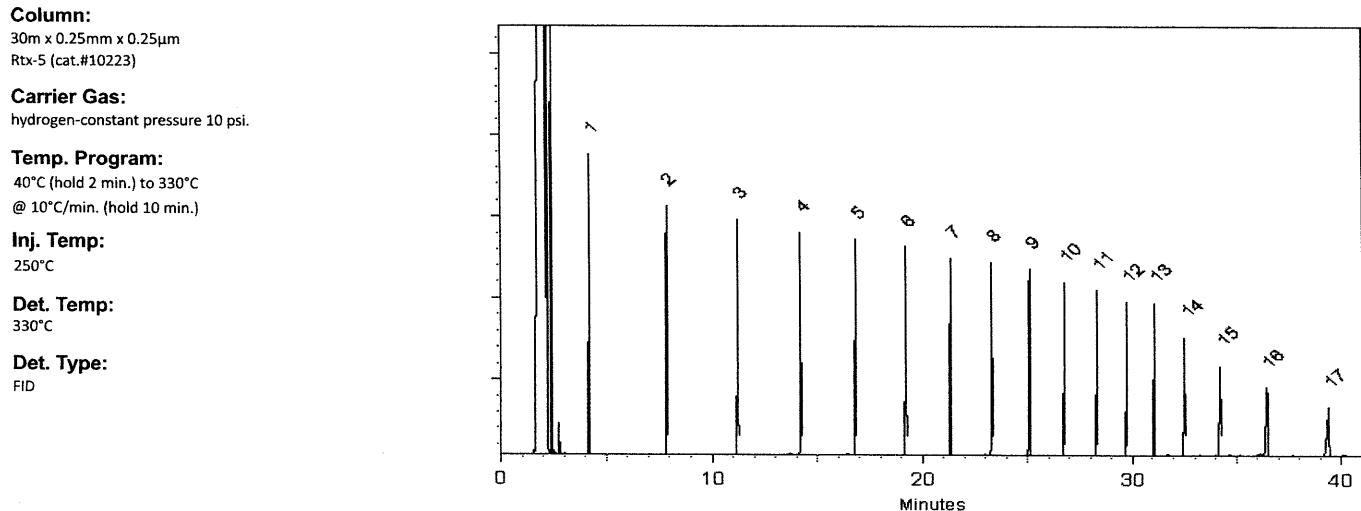
P11968  
L  
P11962 } 7.8  
07/11/20

### C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	n-Octane (C8) <b>CAS #</b> 111-65-9 <b>Purity</b> 99%	505.0 $\mu$ g/mL	+/- 2.9995 $\mu$ g/mL	+/- 12.5465 $\mu$ g/mL	Gravimetric Unstressed Stressed
2	n-Decane (C10) <b>CAS #</b> 124-18-5 <b>Purity</b> 99%	503.0 $\mu$ g/mL	+/- 2.9877 $\mu$ g/mL	+/- 12.4968 $\mu$ g/mL	Gravimetric Unstressed Stressed
3	n-Dodecane (C12) <b>CAS #</b> 112-40-3 <b>Purity</b> 99%	503.5 $\mu$ g/mL	+/- 2.9906 $\mu$ g/mL	+/- 12.5092 $\mu$ g/mL	Gravimetric Unstressed Stressed
4	n-Tetradecane (C14) <b>CAS #</b> 629-59-4 <b>Purity</b> 99%	505.0 $\mu$ g/mL	+/- 2.9995 $\mu$ g/mL	+/- 12.5465 $\mu$ g/mL	Gravimetric Unstressed Stressed
5	n-Hexadecane (C16) <b>CAS #</b> 544-76-3 <b>Purity</b> 98%	504.7 $\mu$ g/mL	+/- 2.9978 $\mu$ g/mL	+/- 12.5390 $\mu$ g/mL	Gravimetric Unstressed Stressed
6	n-Octadecane (C18) <b>CAS #</b> 593-45-3 <b>Purity</b> 97%	504.4 $\mu$ g/mL	+/- 2.9960 $\mu$ g/mL	+/- 12.5316 $\mu$ g/mL	Gravimetric Unstressed Stressed
7	n-Eicosane (C20) <b>CAS #</b> 112-95-8 <b>Purity</b> 99%	503.5 $\mu$ g/mL	+/- 2.9906 $\mu$ g/mL	+/- 12.5092 $\mu$ g/mL	Gravimetric Unstressed Stressed

8	n-Docosane (C22) <b>CAS #</b> 629-97-0 <b>Purity</b> 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) <b>CAS #</b> 646-31-1 <b>Purity</b> 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) <b>CAS #</b> 630-01-3 <b>Purity</b> 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) <b>CAS #</b> 630-02-4 <b>Purity</b> 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) <b>CAS #</b> 638-68-6 <b>Purity</b> 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) <b>CAS #</b> 544-85-4 <b>Purity</b> 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) <b>CAS #</b> 14167-59-0 <b>Purity</b> 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) <b>CAS #</b> 630-06-8 <b>Purity</b> 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) <b>CAS #</b> 7194-85-6 <b>Purity</b> 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) <b>CAS #</b> 4181-95-7 <b>Purity</b> 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%



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.

*[Signature]*  
Brittany Federinko - Operations Tech I

Date Mixed: 29-Jun-2022 Balance: 1128360905

*[Signature]*  
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/ $\mu$ ECD, 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:

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

*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 [| 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 \(Freezer\)<br>-20°C or colder \(Deep Freezer\) | < 25°C              | ≥ 25°C up to 7 days     |](http://www.restek.com>Contact-Us</a> for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.</li><li>• 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.</li></ul></div><div data-bbox=)

- 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 [### Manufacturing Notes:](http://www.restek.com>Contact-Us</a>.</li><li>• 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.</li></ul></div><div data-bbox=)

- 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.



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*

### 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

P13103 } Y.P.  
↓  
P13112 } 01/12/2024

**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

### C E R T I F I E D   V A L U E S

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

**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.)

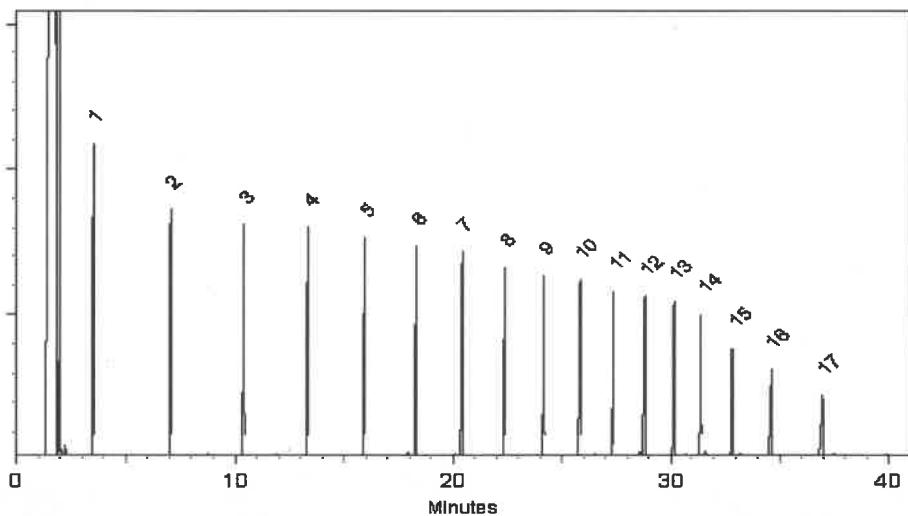
**Inj. Temp:**  
250°C

**Det. Temp:**  
330°C

**Det. Type:**  
FID

**Split Vent:**  
2 ml/min.

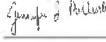
**Inj. Vol**  
1μl



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/ $\mu$ ECD, 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:

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

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

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

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

### Handling Notes:

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



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## CERTIFIED REFERENCE MATERIAL



## Certificate of Analysis

*chromatographic plus*

### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

**Catalog No. :** 31266

**Lot No.:** A0204859

P13103 } Y.P.  
↓  
P13112 } 01/12/2024

**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

### C E R T I F I E D   V A L U E S

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

**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.)

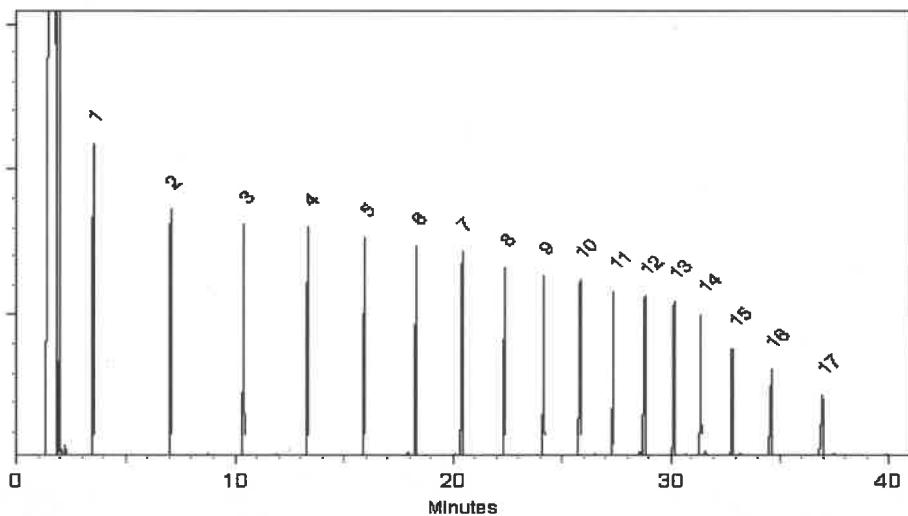
**Inj. Temp:**  
250°C

**Det. Temp:**  
330°C

**Det. Type:**  
FID

**Split Vent:**  
2 ml/min.

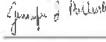
**Inj. Vol**  
1μl



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/ $\mu$ ECD, 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:

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

*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.



CERTIFIED WEIGHT REPORT

Part Number: 72072 Solvent(s): Methylene chloride Lot#: 105345  
Lot Number: 101122  
Description: n-Tetracosane-d50

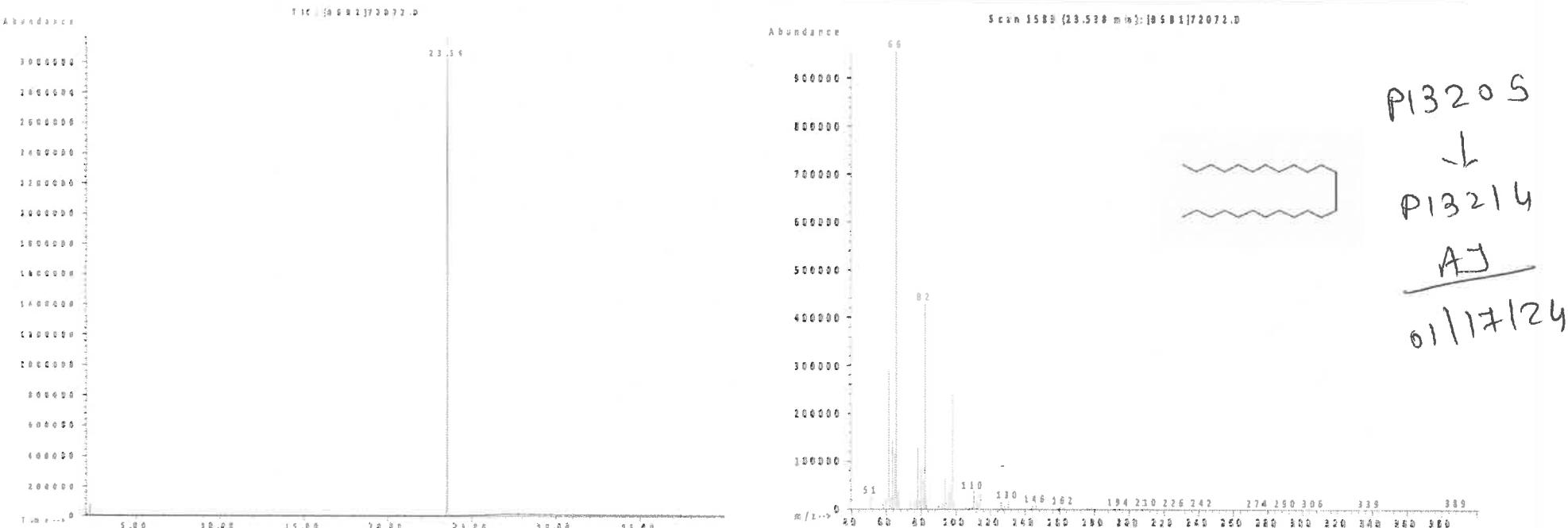
Expiration Date: 101132  
Recommended Storage: Ambient (20 °C)  
Nominal Concentration ( $\mu\text{g/mL}$ ): 1000  
NIST Test ID#: 6UTB SE-05 Balance Uncertainty

Weight(s) shown below were combined and diluted to (mL): 200.0 0.058 Flask Uncertainty

<i>Prashant Chauhan</i>	101122
Formulated By:	Prashant Chauhan
<i>Pedro Rentas</i>	101122
Reviewed By:	Pedro L. Rentas

Compound	RM#	Lot Number	Nominal Conc ( $\mu\text{g/mL}$ )	Purity (%)	Uncertainty Purity	Assay (%D)	Target Weight(g)	Actual Weight(g)	Actual Conc ( $\mu\text{g/mL}$ )	SDS Information			
										(Solvent Safety Info. On Attached pg.)	CAS#	OSHA PEL (TWA)	LDSO
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 0.25 $\mu\text{m}$  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).



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

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

P 13215  
↓  
P 13224

AJ  
01/31/24

\*Not a certified value

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 gravimetrically.

Certified By:

Andrea Schaible  
Chemist



5580 Skylane Blvd  
Santa Rosa, CA 95403

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

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

P 13215  
↓  
P 13224

AJ  
01/31/24

\*Not a certified value

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 gravimetrically.

Certified By:

Andrea Schaible  
Chemist

# 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:** UCRM 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

Page 1 of 2



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



# ABSOLUTE STANDARDS, INC.

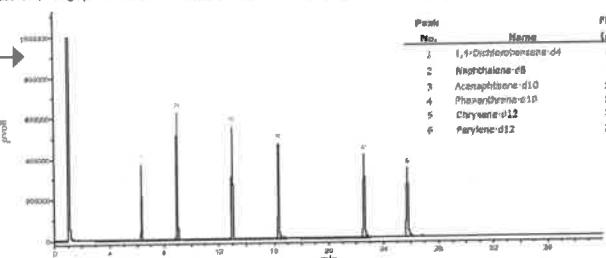
ISO - 17034



## 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																							
<b>Part #</b> <b>Lot #</b>	CERTIFIED WEIGHT REPORT																													
	Part Number:	10009R	Solvent(s):	Methylene chloride	Lot#	78762																								
<b>Shelf Life</b>	Lot Number:	070716																												
	Description:	CLP Priority Pollutant Internal Standards GC/MS Calibration - 6 components																												
<b>Target Compounds</b>	Expiration Date:	07/07/21																												
	Recommended Storage:	Ambient (20 °C)																												
<b>Method of Analysis</b>	Nominal Concentration (µg/mL):	4000	5E-05	Balance Community																										
	NIST Test ID#:	822-275872-11	Weight(s) shown below were combined and diluted to (mL):	500.0	0.058	Final Concentration																								
<b>Qualitative Quantitative</b>	Compound	Ent. Number	Nominal Conc. (µg/mL)	Parity (%)	Uncertainty (±%)	Target Weight(s)	Actual Weight(s)	Actual Conc. (µg/mL)	Expanded Uncertainty (±%)	MSDB Information (Solvent Safety Info. On Attached pg.)																				
	1. 1,4-Dichlorobenzene-d4	11B PR-18488/07287CB1	4000	98	0.2	2.04093	2.04335	4004.7	18.4	2055-02-1 N/A or rat 500mg/kg																				
2. Naphthalene-d8	223 PR-23320/03152HP1	4000	98	0.2	2.02032	2.02084	4001.0	18.2	1148-05-2 10 ppm (50mg/m3) or rat 400mg/kg																					
3. Acenaphthene-d10	2 PR-25444	4000	99	0.2	2.02032	2.02245	4004.2	18.2	15067-28-2 N/A or rat 500mg/kg																					
4. Phenanthrene-d10	249 PR-23050/03171PN1	4000	98	0.2	2.04093	2.04138	4000.8	16.4	1617-22-2 N/A or rat 500mg/kg																					
5. Chrysene-d12	92 I-19280	4000	98	0.2	2.04093	2.04169	4001.3	18.4	1719-03-5 N/A or rat 500mg/kg																					
6. Perylene-d12	247 PR-24113	4000	98	0.2	2.04093	2.04166	4001.2	16.4	1620-08-3 N/A or rat 500mg/kg																					
<small>Absolute Standards, Inc. and Supera, Inc. have tested and reciprocally reviewed the analytical data for these products. They are approved for sale as third party reference standards. Absolute Standards, Inc. and MilliporeSigma, Inc. have met established specifications under the terms of agreement for Reciprocal Data Review (RDR). Comments GC9-M2 Analysis by Melissa Storier Column ID SPB-5 50 m x 0.25mm x 1.5µm Film Thickness. Flow rate: Total flow = 60 mL/min, Helium (carrier) = 6.5 mL, Helium (make-up) = 25 mL. Hewlett Packard (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 = aDq Channel 1. Gas Chromatograph = HP 5890, Auto Sampler = HP 7873. Standard Injection = 0.5 µL, Range = 4</small>																														
 <table border="1"><thead><tr><th>Peak No.</th><th>Name</th><th>FID RT (min.)</th></tr></thead><tbody><tr><td>1</td><td>1,4-Dichlorobenzene-d4</td><td>6.94</td></tr><tr><td>2</td><td>Naphthalene-d8</td><td>8.06</td></tr><tr><td>3</td><td>Acenaphthene-d10</td><td>12.97</td></tr><tr><td>4</td><td>Phenanthrene-d10</td><td>16.37</td></tr><tr><td>5</td><td>Chrysene-d12</td><td>22.62</td></tr><tr><td>6</td><td>Perylene-d12</td><td>25.75</td></tr></tbody></table>										Peak No.	Name	FID RT (min.)	1	1,4-Dichlorobenzene-d4	6.94	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
Peak No.	Name	FID RT (min.)																												
1	1,4-Dichlorobenzene-d4	6.94																												
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4	Phenanthrene-d10	16.37																												
5	Chrysene-d12	22.62																												
6	Perylene-d12	25.75																												
Part # 10009R Lot # 041219		1 of 2		Printed: 5/8/2019, 12:55:50 PM																										

Formulator  
Reviewer

Actual  
Concentration

Uncertainty  
Values

Health &  
Safety

3rd Party  
Comparison

Absolute Standards, Inc. Supera, Inc. PR-10009R L-070716		
Analyte	Sup/Abs Dev (%)	(Sup/Abs) X 100-100
1,4-Dichlorobenzene-d4	2.55	
Naphthalene-d8	2.42	
Acenaphthene-d10	2.74	
Phenanthrene-d10	0.65	
Chrysene-d12	1.92	
Perylene-d12	-1.78	
Total	-0.56	

For More Information, Contact:

StephenArpie@AbsoluteStandards.com

Page 2 of 2





CERTIFIED WEIGHT REPORT

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

Expiration Date: 10/11/32  
Recommended Storage: Ambient (20 °C)  
Nominal Concentration ( $\mu\text{g/mL}$ ): 1000  
NIST Test ID#: 6UTB

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

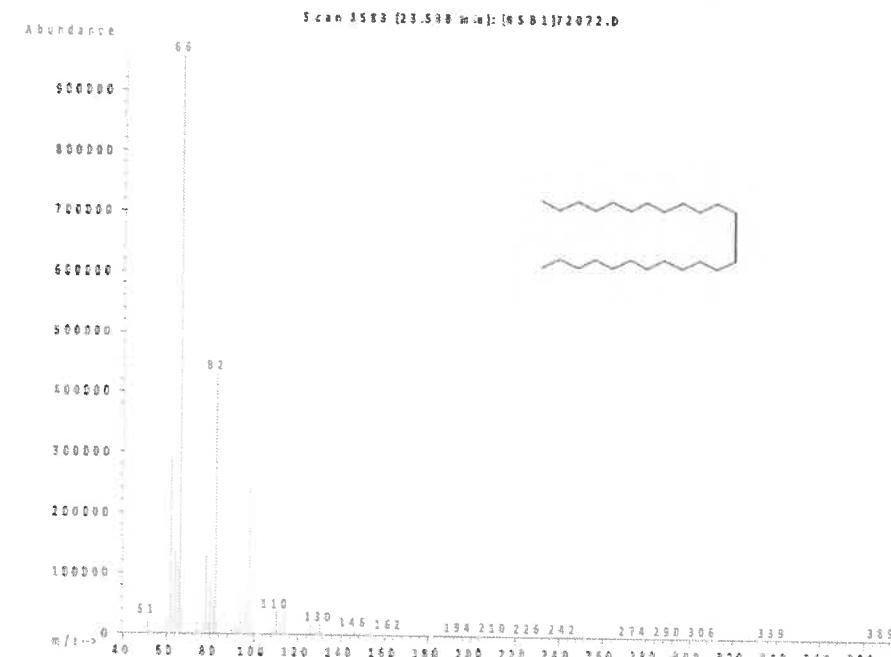
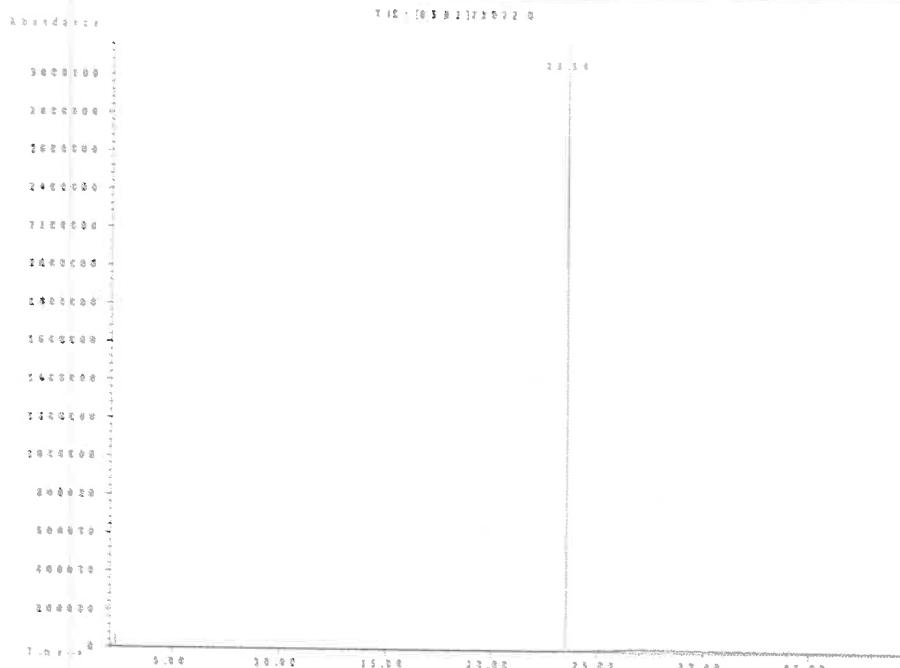
Solvent(s): Methylene chloride  
Lot# 105345

P13477 } X.P.  
↓  
P13h96 } 07/26/24

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

Compound	RM#	Lot Number	Nominal Conc ( $\mu\text{g/mL}$ )	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight(g)	Actual Weight(g)	Actual Conc ( $\mu\text{g/mL}$ )	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 0.25 $\mu\text{m}$  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:** UCRM 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.

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.

Certified Reference Material CRM									
Absolute Standards, Inc. 800-368-1131 www.AbsoluteStandards.com		ISO 17034 Accredited Scopes: http://AbsoluteStandards.com							
CERTIFIED WEIGHT REPORT									
Part # Lot # Shelf Life	Part Number: 070716	Description: CLP Priority Pollutant Internal Standards GC/MS Calibration - 6 components	Solvent(s): Methylene chloride	Lot# 78762					
Expiration Date: 07/07/21	Recomm Storage: Ambient (20 °C)	Nominal Concentration (µg/mL): 4000	5E-06	Balance Community					
NIST Test ID#: B22-275872-11	Weight(s) shown below were combined and diluted to (mL): 500.0	Actual Concentration (µg/mL): 0.058	Peak Intensity						
Target Compounds	Compound 1. 1,4-Dichlorobenzene-d4 2. Naphthalene-d8 3. Acenaphthene-d10 4. Phenanthrene-d10 5. Chrysene-d12 6. Perylene-d12	Ent. Number 11B PR-18488/07287CB1 223 PR-23320/01512HP1 2 PR-25444 PA-23050/01711PN1 I-19280 PR-24113	Nominal Conc (µg/mL) 4000 4000 4000 4000 4000 4000	Parity (%) 98 98 99 98 98 98	Uncertainty (%) 0.2 0.2 0.2 0.2 0.2 0.2	Target Weight(s) 2.04093 2.02082 2.02082 2.04093 2.04093 2.04093	Actual Weight(s) 2.04335 2.02084 2.02245 2.04138 2.04169 2.04166	Actual Conc (µg/mL) 4004.7 4001.0 4004.2 4000.8 4001.3 4001.2	Expanded Uncertainty (+/-) (µg/mL) 18.4 18.2 18.2 16.4 16.4 16.4
Method of Analysis	MSDB Information (Solvent Safety Info. On Attached pg.)								
Comments	Absolute Standards, Inc. and Supracon, Inc. have tested and reciprocally reviewed the analytical data for these products. They are approved for sale as third party reference standards. Absolute Standards, Inc. and MiliporeSigma, Inc. have met established specifications under the terms of agreement for Reciprocal Data Review (RDR). Run 35, "P10009R L070716 [4000µg/mL in MeCl2]" Run Length: 40.00 min, 23998 points at 10 points/second. Created: Sat, Jul 9, 2016 at 1:54:33 PM. Sampled: Sequence 070816-GC9-M2, Method "GC9-M2". Analyzed using Method "GC9-M2". Column ID: SPB-5 50 m x 0.25mm x 1.5µm Film Thickness. Flow rates: Total = 60 mL/min, Helium (carrier) = 6.5 mL, Helium (make-up) = 25 mL. Heating Program (degC): 30 m. Air (detector) = 350 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 = aDq Channel 1. Gas Chromatograph = HP 5890, Auto Sampler = HP 7673, Standard Injection = 0.5 µL, Range = 4								
Qualitative Quantitative	 Peak No. Name FID RT (min.) 1 1,4-Dichlorobenzene-d4 6.94 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								
Part # 10009R Lot # 041219									
1 of 2									
Printed: 5/8/2019, 12:55:50 PM									

Formulator  
Reviewer

Actual  
Concentration

Uncertainty  
Values

Health &  
Safety

3rd Party  
Comparison



For More Information, Contact:

StephenArpie@AbsoluteStandards.com

Page 2 of 2



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



CERTIFIED WEIGHT REPORT

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

Expiration Date: 10/11/32  
Recommended Storage: Ambient (20 °C)  
Nominal Concentration ( $\mu\text{g/mL}$ ): 1000  
NIST Test ID#: 6UTB

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

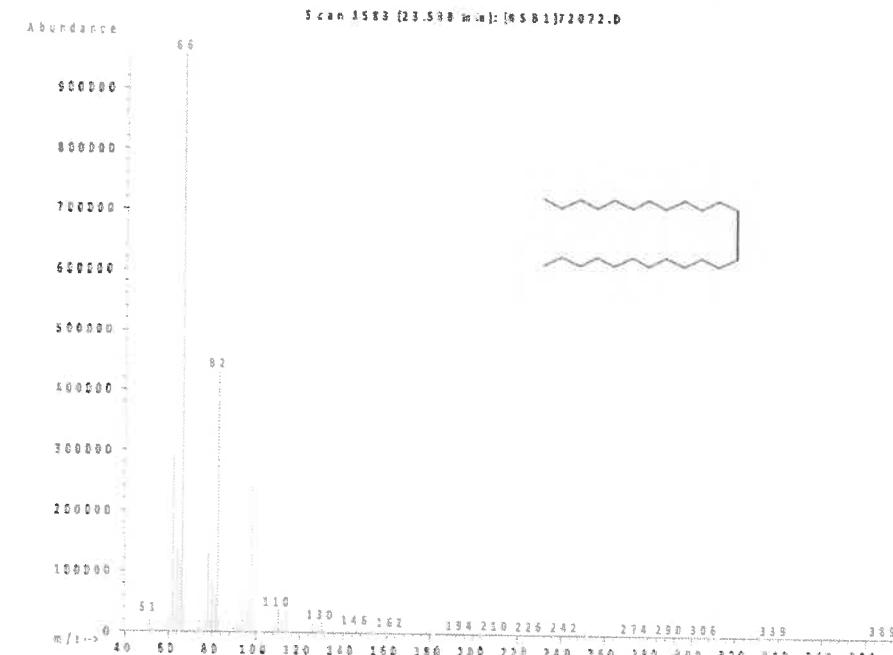
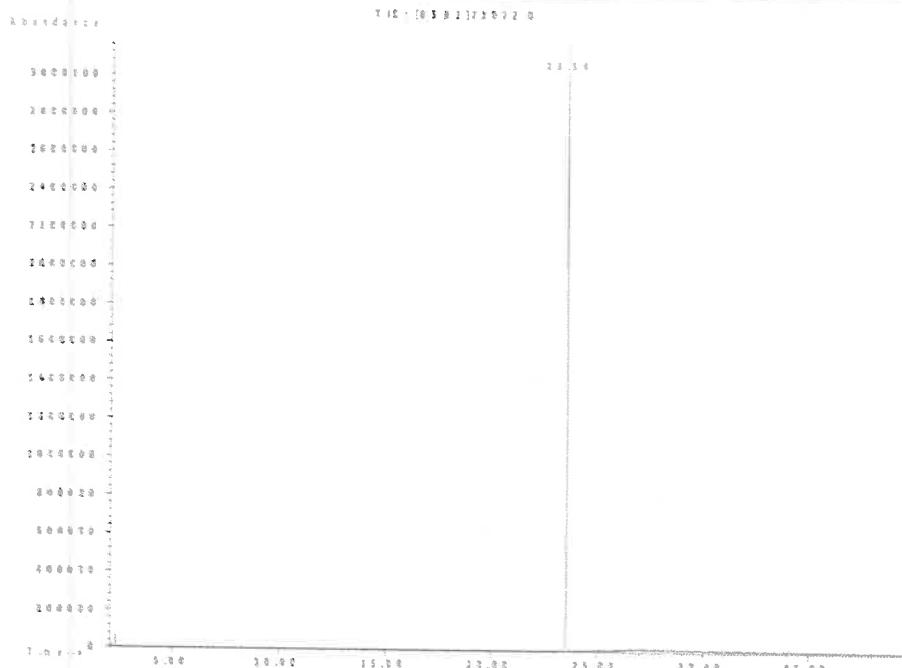
Solvent(s): Methylene chloride  
Lot #: 105345

P13477 } X.P.  
↓  
P13h96 } 07/26/24

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

Compound	RM#	Lot Number	Nominal Conc ( $\mu\text{g/mL}$ )	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight(g)	Actual Weight(g)	Actual Conc ( $\mu\text{g/mL}$ )	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 0.25 $\mu\text{m}$  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:** UCRM 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

Page 1 of 2



Absolute Standards, Inc. • 44 Rossotto Drive • Hamden, CT 06514  
Voice: 800-368-1131 • Fax: 800-410-2577 • eMail: [StephenArpie@AbsoluteStandards.com](mailto: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			
<b>Part #</b> <b>Lot #</b> <b>Shelf Life</b>	CERTIFIED WEIGHT REPORT		Solvent(s): Methylene chloride		Lot# 78762					
	Part Number: 070716	Description: CLP Priority Pollutant Internal Standards GC/MS Calibration - 6 components	Expiration Date: 07/07/21	Recomm Storage: Ambient (20 °C)	Nominal Concentration (µg/mL): 4000	NIST Test ID#: B22-275872-11	Weight(s) shown below were combined and diluted to (mL): 500.0	5E-05 Balance Recovery	Actual Weight(s): 0.058	Actual Uncertainty: 0.008
<b>Target Compounds</b>	Compound	Ent Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty (µg/mL)	Target Weight(s)	Actual Conc (µg/mL)	Actual Weight(s)	Actual Uncertainty (µg/mL)	
	1. 1,4-Dichlorobenzene-d4 2. Naphthalene-d8 3. Acenaphthene-d10 4. Phenanthrene-d10 5. Chrysene-d12 6. Perylene-d12	11B PR-18488/07287CB1 223 PR-23320/01512HP1 2 PR-25444 249 PR-23050/01711PN1 92 I-19280 247 PR-24113	4000 4000 4000 4000 4000 4000	98 98 98 98 98 98	0.2 0.2 0.2 0.2 0.2 0.2	2.04093 2.02082 2.02082 2.04093 2.04093 2.04093	2.04335 2.02084 2.02245 2.04138 2.04169 2.04166	4004.7 4001.0 4004.2 4000.8 4001.3 4001.2	18.4 18.2 18.2 18.4 18.4 18.4	2055-02-1 1148-05-2 15067-28-2 1617-22-2 1719-03-5 1620-08-3
<b>Method of Analysis</b>	MSDB Information (Solvent Safety Info. On Attached pg.)									
	CAS#	OSHA PEL (TWA)	LD50							
<b>Qualitative Quantitative</b>	Absolute Standards, Inc. and Supracon, Inc. have tested and reciprocally reviewed the analytical data for these products. They are approved for sale as third party reference standards. Absolute Standards, Inc. and MiliporeSigma, Inc. have met established specifications under the terms of agreement for Reciprocal Data Review (RDR). Run 35, "P10009R L070716 [4000 µg/mL in MeCl2]" Run Length: 40.00 min, 23998 points at 10 points/second. Created: Sat, Jul 9, 2016 at 1:54:33 PM. Sampled: Sequence 070816-GC9-M2, Method "GC9-M2". Analyzed using Method "GC9-M2".									
	Comments GC9-M2 Analysis by Melissa Storier Column ID SPB-5 50 m x 0.25mm x 1.5µm Film Thickness. Flow rate: Total flow = 60 mL/min, Helium (carrier) = 6.5 mL, Helium (make-up) = 25 mL. Hewlett Packard (detector) = 30 mL, Air (detector) = 250 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 = aDq Channel 1. Gas Chromatograph = HP 5890, Auto Sampler = HP 7673, Standard Injection = 0.5 µL, Range = 4									
 Peak No. Name FID RT (min.) 1 1,4-Dichlorobenzene-d4 6.94 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										
Part # 10009R Lot # 041219		1 of 2		Printed: 5/8/2019, 12:55:50 PM						

Formulator  
Reviewer

Actual  
Concentration

Uncertainty  
Values

Health &  
Safety

3rd Party  
Comparison

For More Information, Contact:

StephenArpie@AbsoluteStandards.com

Page 2 of 2

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





CERTIFIED WEIGHT REPORT

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

Expiration Date: 10/11/32  
Recommended Storage: Ambient (20 °C)  
Nominal Concentration ( $\mu\text{g/mL}$ ): 1000  
NIST Test ID#: 6UTB

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

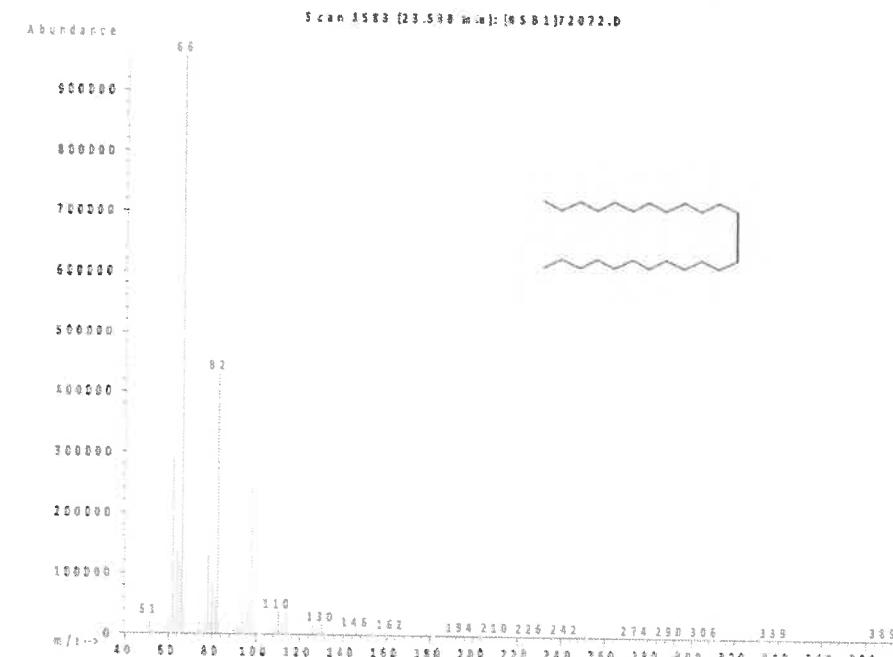
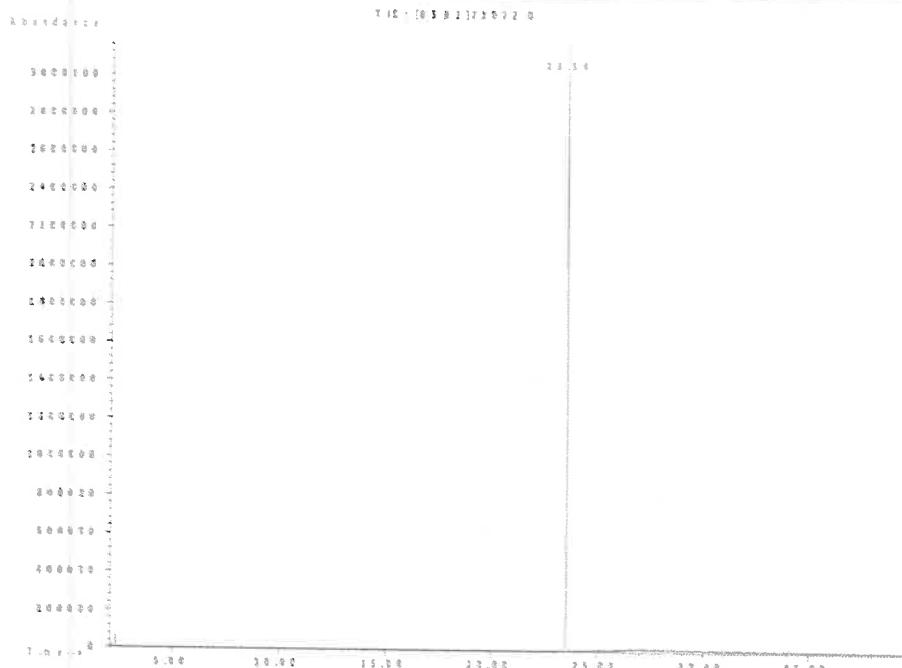
Solvent(s): Methylene chloride  
Lot #: 105345

P13477 } X.P.  
↓  
P13h96 } 07/26/24

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

Compound	RM#	Lot Number	Nominal Conc ( $\mu\text{g/mL}$ )	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight(g)	Actual Weight(g)	Actual Conc ( $\mu\text{g/mL}$ )	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 0.25 $\mu\text{m}$  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:** UCRM 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.

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																					
<b>Part #</b> <b>Lot #</b>	CERTIFIED WEIGHT REPORT																											
	Part Number: 070716	Lot Number: 070716	Solvent(s): Methylene chloride	Lot# 78762																								
<b>Shelf Life</b>	Recommended Storage: Ambient (20 °C)																											
	Expiration Date: 07/07/21	Nominal Concentration (µg/mL): 4000	5E-06	Balance Recovery																								
<b>Target Compounds</b>	Nominal Test ID#: B22-275872-11		Weight(s) shown below were combined and diluted to (mL): 500.0	Actual Weight(s): 0.058	Actual Uncertainty: Peak Intensity																							
	Compound	Ent. Number	Nominal Conc. (µg/mL)	Actual Weight(s)	Actual Uncertainty	MSDB Information (Solvent Safety Info. On Attached pg.)																						
1. 1,4-Dichlorobenzene-d4	11B PR-18488/07287CB1	4000	98	0.2	2.04093	2.04335	4004.7	18.4	2055-02-1	N/A	enr/rat 500mg/kg																	
2. Naphthalene-d8	223 PR-23320/01512HP1	4000	98	0.2	2.02032	2.02084	4001.0	18.2	1148-05-2	10 ppm (50mg/m3/Hg)	enr/rat 400mg/kg																	
3. Acenaphthene-d10	2 PR-25444	4000	99	0.2	2.02032	2.02245	4004.2	18.2	15067-28-2	N/A	enr/rat 500mg/kg																	
4. Phenanthrene-d10	249 PR-23050/01711PN1	4000	98	0.2	2.04093	2.04138	4000.8	16.4	1617-22-2	N/A	N/A																	
5. Chrysene-d12	92 I-19280	4000	98	0.2	2.04093	2.04169	4001.3	18.4	1719-03-5	N/A	N/A																	
6. Perylene-d12	247 PR-24113	4000	98	0.2	2.04093	2.04166	4001.2	16.4	1620-08-3	N/A	N/A																	
<small>Absolute Standards, Inc. and Supracon, Inc. have tested and reciprocally reviewed the analytical data for these products. They are approved for sale as third party reference standards. Absolute Standards, Inc. and MilliporeSigma, Inc. have met established specifications under the terms of agreement for Reciprocal Data Review (RDR). Comments GC9-M2 Analysis by Melissa Storier Column ID SPB-5 50 m x 0.25mm x 1.5µm Film Thickness. Flow rate: Total flow = 60 mL/min, Helium (carrier) = 6.5 mL, Helium (make-up) = 25 mL. Hewlett Packard (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 = aDq Channel 1. Gas Chromatograph = HP 5890, Auto Sampler = HP 7873, Standard Injection = 0.5 µL, Range = 4</small>																												
<small>Absolute Standards, Inc. P#10009R L#070716 Supracon, Inc. P#47906 L#A5568P</small>																												
<table border="1"><thead><tr><th>Analyte</th><th>Sup/Abs Dev (%)</th></tr></thead><tbody><tr><td>(Sum/Abs) X 100-100</td><td></td></tr><tr><td>1,4-Dichlorobenzene-d4</td><td>2.5%</td></tr><tr><td>Naphthalene-d8</td><td>2.4%</td></tr><tr><td>Acenaphthene-d10</td><td>2.7%</td></tr><tr><td>Phenanthrene-d10</td><td>0.6%</td></tr><tr><td>Chrysene-d12</td><td>1.9%</td></tr><tr><td>Perylene-d12</td><td>-1.2%</td></tr><tr><td>Total</td><td>-0.5%</td></tr></tbody></table>											Analyte	Sup/Abs Dev (%)	(Sum/Abs) X 100-100		1,4-Dichlorobenzene-d4	2.5%	Naphthalene-d8	2.4%	Acenaphthene-d10	2.7%	Phenanthrene-d10	0.6%	Chrysene-d12	1.9%	Perylene-d12	-1.2%	Total	-0.5%
Analyte	Sup/Abs Dev (%)																											
(Sum/Abs) X 100-100																												
1,4-Dichlorobenzene-d4	2.5%																											
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Phenanthrene-d10	0.6%																											
Chrysene-d12	1.9%																											
Perylene-d12	-1.2%																											
Total	-0.5%																											
Qualitative Quantitative				Peak No.	Name	FID RT (min.)																						
		1	1,4-Dichlorobenzene-d4	6.94																								
		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																								
Part # 10009R Lot # 041219		1 of 2		Printed: 5/8/2019, 12:55:50 PM																								

For More Information, Contact:

StephenArpie@AbsoluteStandards.com

Page 2 of 2

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





CERTIFIED WEIGHT REPORT

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

Expiration Date: 10/11/32  
Recommended Storage: Ambient (20 °C)  
Nominal Concentration ( $\mu\text{g/mL}$ ): 1000  
NIST Test ID#: 6UTB

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

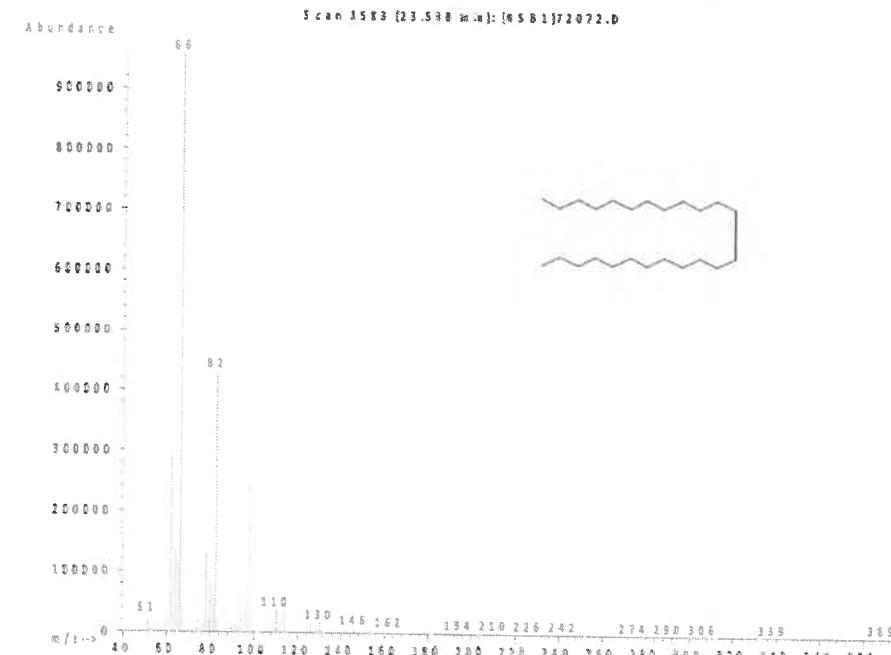
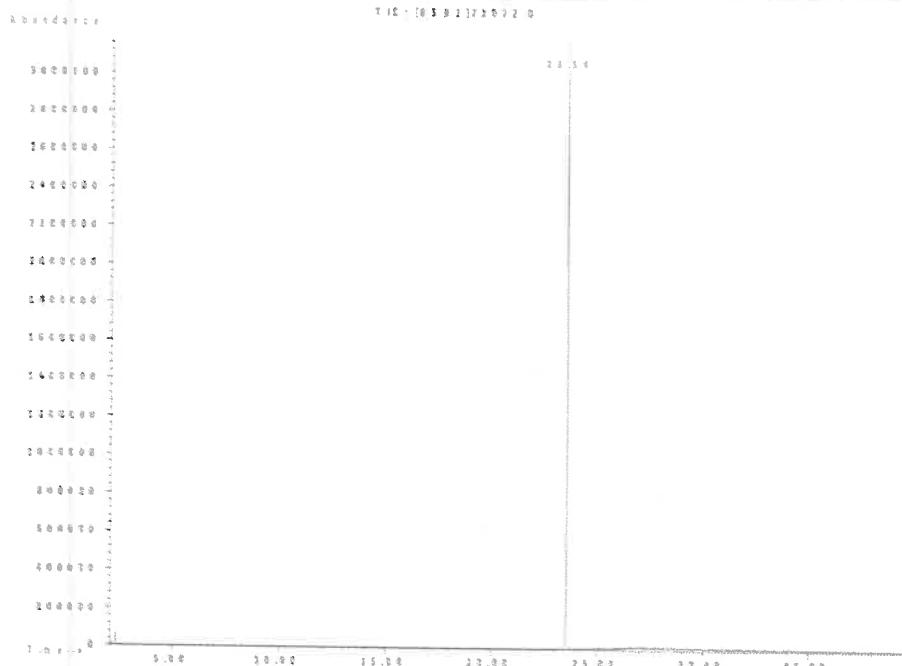
Solvent(s): Methylene chloride  
Lot# 105345

P13477 } X.P.  
↓  
P13h96 } 07/26/24

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

Compound	RM#	Lot Number	Nominal Conc ( $\mu\text{g/mL}$ )	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight(g)	Actual Weight(g)	Actual Conc ( $\mu\text{g/mL}$ )	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 0.25 $\mu\text{m}$  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).

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG013125\  
 Data File : FG015275.D  
 Signal(s) : FID1A.ch  
 Acq On : 31 Jan 2025 12:29  
 Operator : YP\AJ  
 Sample : Q1232-01  
 Misc :  
 ALS Vial : 14 Sample Multiplier: 1

**Instrument :**  
**FID\_G**  
**ClientSampleId :**  
**JPP-46.2-012925**

**Manual Integrations**  
**APPROVED**

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

Integration File: autoint1.e  
 Quant Time: Feb 01 01:13:20 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 : Rx1-1ms  
 Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

9) S TETRACOSANE-d50 (SURR...	15.055	3203913	24.977 ug/mlm
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Target Compounds

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG011325\  
 Data File : FG015275.D  
 Signal(s) : FID1A.ch  
 Acq On : 31 Jan 2025 12:29  
 Operator : YP\AJ  
 Sample : Q1232-01  
 Misc :  
 ALS Vial : 14 Sample Multiplier: 1

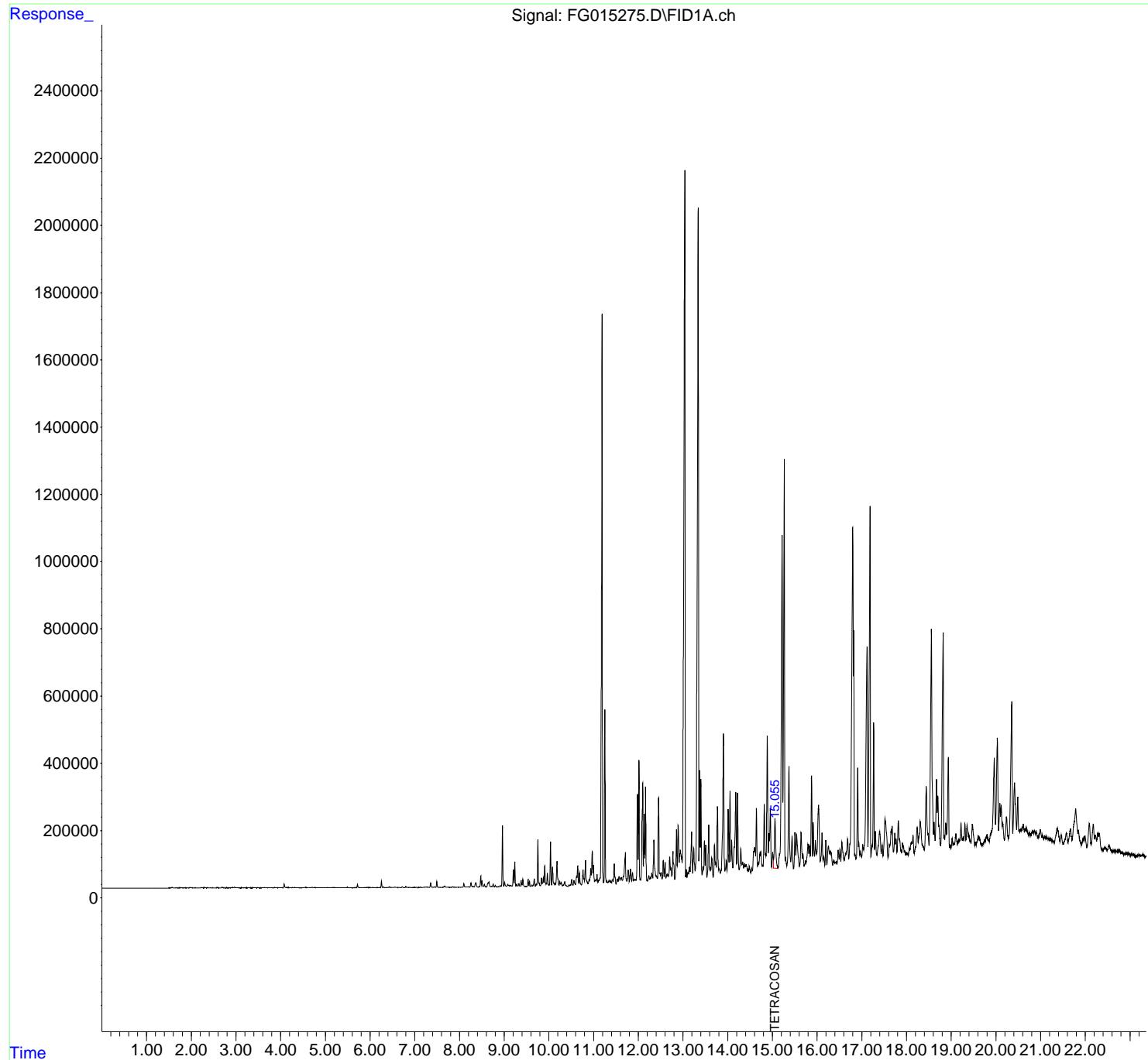
**Instrument :**  
 FID\_G  
**ClientSampleId :**  
 JPP-46.2-012925

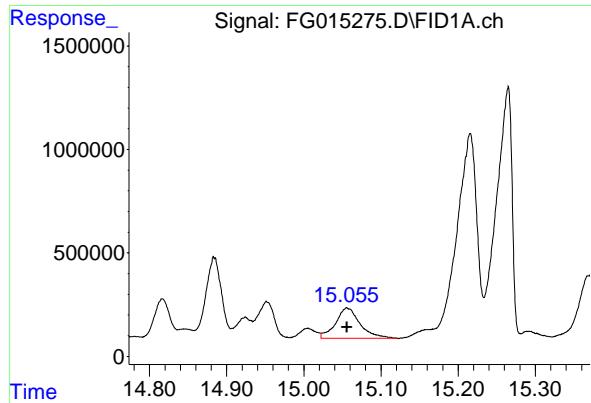
Integration File: autoint1.e  
 Quant Time: Feb 01 01:13:20 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG011325.M  
 Quant Title :  
 QLast Update : Fri Jan 24 12:51:39 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1uL  
 Signal Phase : Rx1-1ms  
 Signal Info : 20mx0.18mmx0.18um

**Manual Integrations**  
**APPROVED**

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





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 15.055 min  
Delta R.T.: -0.001 min  
Instrument:  
Response: 3203913 FID\_G  
Conc: 24.98 ug/ml ClientSampleId :  
JPP-46.2-012925

Manual Integrations  
APPROVED

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG01312  
 Data File : FG015275.D  
 Signal(s) : FID1A.ch  
 Acq On : 31 Jan 2025 12: 29  
 Sample : Q1232-01  
 Misc :  
 ALS Vial : 14 Sample Multiplier: 1

rteres

**Instrument :**

FID\_G

**ClientSampleId :**

JPP-46.2-012925

**Area Percent Report**

**Manual Integrations APPROVED**

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

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. 419	BH	44	-3313	-0. 01%	-0. 001%
2	4. 432	4. 419	4. 452	PH	-115	-3005	-0. 01%	-0. 001%
3	4. 456	4. 452	4. 463	PH	-183	-1297	-0. 00%	-0. 000%
4	4. 475	4. 463	4. 494	PH	-73	-2321	-0. 01%	-0. 000%
5	4. 497	4. 494	4. 504	PH	-76	-827	-0. 00%	-0. 000%
6	4. 553	4. 504	4. 572	PH	1341	21951	0. 05%	0. 004%
7	4. 577	4. 572	4. 601	HH	596	5547	0. 01%	0. 001%
8	4. 616	4. 601	4. 631	PH	159	722	0. 00%	0. 000%
9	4. 654	4. 631	4. 663	PH	250	2733	0. 01%	0. 000%
10	4. 664	4. 663	4. 680	HH	277	562	0. 00%	0. 000%
11	4. 709	4. 680	4. 738	PH	1566	18382	0. 05%	0. 003%
12	4. 771	4. 738	4. 813	PH	718	7873	0. 02%	0. 001%
13	4. 827	4. 813	4. 845	PH	152	379	0. 00%	0. 000%
14	4. 855	4. 845	4. 874	PH	-12	-1522	-0. 00%	-0. 000%
15	4. 915	4. 874	4. 919	PH	343	672	0. 00%	0. 000%
16	4. 923	4. 919	4. 941	HH	347	3011	0. 01%	0. 001%
17	4. 960	4. 941	4. 974	HH	219	1407	0. 00%	0. 000%
18	5. 002	4. 974	5. 012	PH	68	48	0. 00%	0. 000%
19	5. 044	5. 012	5. 071	PH	658	7274	0. 02%	0. 001%
20	5. 100	5. 071	5. 105	PH	152	187	0. 00%	0. 000%
21	5. 126	5. 105	5. 139	HH	341	4788	0. 01%	0. 001%
22	5. 160	5. 139	5. 173	HH	655	9501	0. 02%	0. 002%
23	5. 183	5. 173	5. 192	HH	554	5444	0. 01%	0. 001%
24	5. 202	5. 192	5. 235	HH	611	6342	0. 02%	0. 001%
25	5. 253	5. 235	5. 281	PH	447	5010	0. 01%	0. 001%
26	5. 300	5. 281	5. 316	PH	435	3270	0. 01%	0. 001%
27	5. 331	5. 316	5. 347	PH	306	2284	0. 01%	0. 000%
28	5. 364	5. 347	5. 398	PH	462	3110	0. 01%	0. 001%
29	5. 404	5. 398	5. 415	PH	-132	-1580	-0. 00%	-0. 000%
30	5. 429	5. 415	5. 444	PH	-49	-1988	-0. 00%	-0. 000%
31	5. 464	5. 444	5. 471	PH	-38	-1179	-0. 00%	-0. 000%
32	5. 489	5. 471	5. 515	PH	2159	21380	0. 05%	0. 004%
33	5. 528	5. 515	5. 548	HH	243	2196	0. 01%	0. 000%
34	5. 562	5. 548	5. 597	HH	206	-1146	-0. 00%	-0. 000%
35	5. 621	5. 597	5. 641	PH	129	-2679	-0. 01%	-0. 000%
36	5. 654	5. 641	5. 664	PH	-169	-2826	-0. 01%	-0. 000%

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37	5. 685	5. 664	5. 701	PH	1246	13304	0. 03%	0. 002%	
38	5. 720	5. 701	5. 746	HH	10679	108683	0	0	
39	5. 754	5. 746	5. 780	HH	644	5584	0	0	
40	5. 795	5. 780	5. 829	PH	263	954	0	0	
41	5. 848	5. 829	5. 855	PH	31	-638	-0	Reviewed By :Yogesh Patel 02/03/2025	
42	5. 874	5. 855	5. 899	PH	639	7337	0	Supervised By :Ankita Jodhani 02/03/2025	
43	5. 914	5. 899	5. 931	PH	1360	13113	0. 03%	0. 002%	
44	5. 942	5. 931	5. 963	HH	1002	12313	0. 03%	0. 002%	
45	5. 976	5. 963	5. 990	HH	1412	15330	0. 04%	0. 003%	
46	6. 004	5. 990	6. 029	HH	1088	15071	0. 04%	0. 003%	
47	6. 055	6. 029	6. 086	HH	975	16506	0. 04%	0. 003%	
48	6. 098	6. 086	6. 118	HH	395	4817	0. 01%	0. 001%	
49	6. 129	6. 118	6. 145	HH	204	2244	0. 01%	0. 000%	
50	6. 162	6. 145	6. 183	HH	589	7899	0. 02%	0. 001%	
51	6. 221	6. 183	6. 236	HH	1693	22486	0. 06%	0. 004%	
52	6. 256	6. 236	6. 291	HH	20165	214094	0. 53%	0. 038%	
53	6. 306	6. 291	6. 334	HH	1902	26659	0. 07%	0. 005%	
54	6. 363	6. 334	6. 385	HH	694	14291	0. 04%	0. 003%	
55	6. 409	6. 385	6. 419	HH	1057	15779	0. 04%	0. 003%	
56	6. 436	6. 419	6. 473	HH	2735	47198	0. 12%	0. 008%	
57	6. 488	6. 473	6. 501	HH	1071	12492	0. 03%	0. 002%	
58	6. 513	6. 501	6. 535	HH	981	16281	0. 04%	0. 003%	
59	6. 557	6. 535	6. 600	HH	2414	46601	0. 12%	0. 008%	
60	6. 609	6. 600	6. 621	HH	802	8454	0. 02%	0. 001%	
61	6. 642	6. 621	6. 693	HH	1002	28214	0. 07%	0. 005%	
62	6. 721	6. 693	6. 772	HH	2946	53423	0. 13%	0. 009%	
63	6. 799	6. 772	6. 820	HH	4572	52206	0. 13%	0. 009%	
64	6. 836	6. 820	6. 859	HH	1285	22383	0. 06%	0. 004%	
65	6. 876	6. 859	6. 902	HH	1332	22045	0. 05%	0. 004%	
66	6. 921	6. 902	6. 940	HH	992	15475	0. 04%	0. 003%	
67	6. 952	6. 940	6. 960	HH	560	5341	0. 01%	0. 001%	
68	6. 974	6. 960	6. 978	HH	574	5307	0. 01%	0. 001%	
69	6. 981	6. 978	6. 986	HH	619	2928	0. 01%	0. 001%	
70	7. 005	6. 986	7. 029	HH	1871	24656	0. 06%	0. 004%	
71	7. 045	7. 029	7. 097	HH	1829	35360	0. 09%	0. 006%	
72	7. 127	7. 097	7. 151	HH	2460	36615	0. 09%	0. 006%	
73	7. 174	7. 151	7. 189	HH	709	14220	0. 04%	0. 003%	
74	7. 210	7. 189	7. 228	HH	2002	30922	0. 08%	0. 005%	
75	7. 257	7. 228	7. 277	HH	2258	48794	0. 12%	0. 009%	
76	7. 296	7. 277	7. 325	HH	2370	43179	0. 11%	0. 008%	
77	7. 356	7. 325	7. 383	HH	15190	185822	0. 46%	0. 033%	
78	7. 403	7. 383	7. 426	HH	1991	40540	0. 10%	0. 007%	
79	7. 445	7. 426	7. 472	HH	3219	52281	0. 13%	0. 009%	
80	7. 494	7. 472	7. 526	HH	18483	210150	0. 52%	0. 037%	
81	7. 543	7. 526	7. 565	HH	1550	28775	0. 07%	0. 005%	
82	7. 572	7. 565	7. 588	HH	1157	14053	0. 03%	0. 002%	
83	7. 621	7. 588	7. 629	HH	1300	26790	0. 07%	0. 005%	
84	7. 649	7. 629	7. 658	HH	2675	34063	0. 08%	0. 006%	
85	7. 673	7. 658	7. 700	HH	5475	81160	0. 20%	0. 014%	
86	7. 710	7. 700	7. 716	HH	1545	13978	0. 03%	0. 002%	
87	7. 737	7. 716	7. 750	HH	1879	34343	0. 09%	0. 006%	
88	7. 760	7. 750	7. 778	HH	1701	23173	0. 06%	0. 004%	
89	7. 794	7. 778	7. 820	HH	1375	29771	0. 07%	0. 005%	

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90	7. 847	7. 820	7. 882	HH	rteres	3085	68139	0. 17%	0. 012%	
91	7. 901	7. 882	7. 927	HH		2098	39408	0.	Manual Integrations	APPROVED
92	7. 945	7. 927	7. 950	HH		1480	17535	0.		
93	7. 960	7. 950	7. 977	HH		1708	23929	0.	Reviewed By :Yogesh Patel	02/03/2025
94	7. 989	7. 977	8. 000	HH		1738	21703	0.	Supervised By :Ankita Jodhani	02/03/2025
95	8. 013	8. 000	8. 032	HH		1701	27672	0.		
96	8. 048	8. 032	8. 075	HH		1775	38142	0. 09%	0. 007%	
97	8. 100	8. 075	8. 150	HH		12796	209619	0. 52%	0. 037%	
98	8. 165	8. 150	8. 185	HH		2502	49246	0. 12%	0. 009%	
99	8. 201	8. 185	8. 224	HH		2871	52104	0. 13%	0. 009%	
100	8. 259	8. 224	8. 295	HH		14812	258489	0. 64%	0. 046%	
101	8. 308	8. 295	8. 336	HH		4576	80175	0. 20%	0. 014%	
102	8. 357	8. 336	8. 364	HH		13702	140694	0. 35%	0. 025%	
103	8. 372	8. 364	8. 413	HH		14028	192651	0. 48%	0. 034%	
104	8. 437	8. 413	8. 448	HH		2775	50803	0. 13%	0. 009%	
105	8. 478	8. 448	8. 493	HH		35413	424700	1. 06%	0. 075%	
106	8. 505	8. 493	8. 525	HH		20894	236358	0. 59%	0. 042%	
107	8. 559	8. 525	8. 584	HH		10344	202184	0. 50%	0. 036%	
108	8. 596	8. 584	8. 612	HH		2911	48148	0. 12%	0. 009%	
109	8. 642	8. 612	8. 648	HH		14435	218034	0. 54%	0. 039%	
110	8. 661	8. 648	8. 697	HH		17444	288582	0. 72%	0. 051%	
111	8. 717	8. 697	8. 733	HH		4234	79371	0. 20%	0. 014%	
112	8. 755	8. 733	8. 774	HH		11427	153662	0. 38%	0. 027%	
113	8. 781	8. 774	8. 787	HH		3656	29407	0. 07%	0. 005%	
114	8. 804	8. 787	8. 824	HH		7214	103716	0. 26%	0. 018%	
115	8. 834	8. 824	8. 875	HH		3361	88422	0. 22%	0. 016%	
116	8. 889	8. 875	8. 894	HH		2923	32088	0. 08%	0. 006%	
117	8. 916	8. 894	8. 938	HH		6885	124760	0. 31%	0. 022%	
118	8. 964	8. 938	8. 991	HH		184919	1908595	4. 75%	0. 337%	
119	9. 012	8. 991	9. 052	HH		16693	305243	0. 76%	0. 054%	
120	9. 081	9. 052	9. 096	HH		10356	188157	0. 47%	0. 033%	
121	9. 104	9. 096	9. 119	HH		7351	85264	0. 21%	0. 015%	
122	9. 134	9. 119	9. 146	HH		7586	99014	0. 25%	0. 017%	
123	9. 157	9. 146	9. 178	HH		6821	109951	0. 27%	0. 019%	
124	9. 208	9. 178	9. 224	HH		53573	656638	1. 63%	0. 116%	
125	9. 239	9. 224	9. 265	HH		77253	839059	2. 09%	0. 148%	
126	9. 281	9. 265	9. 308	HH		10728	186649	0. 46%	0. 033%	
127	9. 332	9. 308	9. 352	HH		12891	208984	0. 52%	0. 037%	
128	9. 380	9. 352	9. 403	HH		21255	354939	0. 88%	0. 063%	
129	9. 420	9. 403	9. 464	HH		25061	390730	0. 97%	0. 069%	
130	9. 482	9. 464	9. 508	HH		4107	96397	0. 24%	0. 017%	
131	9. 537	9. 508	9. 553	HH		25258	330379	0. 82%	0. 058%	
132	9. 569	9. 553	9. 602	HH		20928	282380	0. 70%	0. 050%	
133	9. 620	9. 602	9. 638	HH		8089	123081	0. 31%	0. 022%	
134	9. 674	9. 638	9. 696	HH		25593	426780	1. 06%	0. 075%	
135	9. 716	9. 696	9. 729	HH		10795	159193	0. 40%	0. 028%	
136	9. 756	9. 729	9. 809	HH		142716	1779375	4. 43%	0. 314%	
137	9. 837	9. 809	9. 852	HH		29009	415665	1. 03%	0. 073%	
138	9. 879	9. 852	9. 891	HH		29760	445874	1. 11%	0. 079%	
139	9. 909	9. 891	9. 929	HH		65468	847555	2. 11%	0. 150%	
140	9. 939	9. 929	9. 949	HH		14272	152576	0. 38%	0. 027%	
141	9. 969	9. 949	10. 010	HH		43535	686861	1. 71%	0. 121%	

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						rteres		
142	10. 039	10. 010	10. 061	HH	137059	1600744	3.	98%
143	10. 083	10. 061	10. 122	HH	61996	957657	0.	283%
144	10. 136	10. 122	10. 152	HH	14819	220347	0.	
145	10. 183	10. 152	10. 227	HH	78794	1410840	3.	

146	10. 245	10. 227	10. 264	HH	19536	301455	0.	
147	10. 279	10. 264	10. 305	HH	16372	266741	0.	
148	10. 323	10. 305	10. 331	HH	8006	109744	0.	27%
149	10. 354	10. 331	10. 426	HH	17400	480386	1.	20%
150	10. 450	10. 426	10. 464	HH	8451	146397	0.	026%

151	10. 483	10. 464	10. 490	HH	7972	112646	0.	28%
152	10. 511	10. 490	10. 542	HH	24746	426301	1.	06%
153	10. 561	10. 542	10. 595	HH	21418	445214	1.	11%
154	10. 621	10. 595	10. 630	HH	34299	476128	1.	18%
155	10. 646	10. 630	10. 669	HH	65196	942553	2.	34%

156	10. 687	10. 669	10. 727	HH	44387	726789	1.	81%
157	10. 765	10. 727	10. 782	HH	52433	904200	2.	25%
158	10. 788	10. 782	10. 799	HH	26767	248842	0.	62%
159	10. 819	10. 799	10. 875	HH	81715	1484482	3.	69%
160	10. 902	10. 875	10. 911	HH	25031	394767	0.	98%

161	10. 938	10. 911	10. 950	HH	57351	922062	2.	29%
162	10. 971	10. 950	10. 989	HH	106666	1658953	4.	13%
163	10. 999	10. 989	11. 020	HH	67011	819349	2.	04%
164	11. 047	11. 020	11. 058	HH	24507	494683	1.	23%
165	11. 078	11. 058	11. 096	HH	39186	625444	1.	56%

166	11. 110	11. 096	11. 124	HH	23209	349742	0.	87%
167	11. 192	11. 124	11. 223	HH	1698266	23716236	59.	00%
168	11. 254	11. 223	11. 289	HH	528194	5890938	14.	66%
169	11. 301	11. 289	11. 316	HH	20303	290794	0.	72%
170	11. 348	11. 316	11. 371	HH	22989	604064	1.	50%

171	11. 384	11. 371	11. 403	HH	21171	343168	0.	85%
172	11. 422	11. 403	11. 440	HH	24235	454732	1.	13%
173	11. 461	11. 440	11. 503	HH	71162	1317009	3.	28%
174	11. 535	11. 503	11. 550	HH	25790	585638	1.	46%
175	11. 570	11. 550	11. 592	HH	33176	683525	1.	70%

176	11. 623	11. 592	11. 645	HH	30341	836598	2.	08%
177	11. 668	11. 645	11. 673	HH	34786	496352	1.	23%
178	11. 711	11. 673	11. 745	HH	105484	2281171	5.	67%
179	11. 776	11. 745	11. 799	HH	51743	1067948	2.	66%
180	11. 826	11. 799	11. 848	HH	55941	1043286	2.	60%

181	11. 870	11. 848	11. 892	HH	45160	799310	1.	99%
182	11. 908	11. 892	11. 919	HH	25108	378205	0.	94%
183	11. 934	11. 919	11. 950	HH	24988	426489	1.	06%
184	11. 982	11. 950	11. 997	HH	276942	3629997	9.	03%
185	12. 015	11. 997	12. 040	HH	378631	4390749	10.	92%

186	12. 045	12. 040	12. 049	HH	23432	126118	0.	31%
187	12. 099	12. 049	12. 115	HH	311440	5676517	14.	12%
188	12. 131	12. 115	12. 145	HH	218693	2651701	6.	60%
189	12. 163	12. 145	12. 192	HH	300859	3792591	9.	43%
190	12. 203	12. 192	12. 215	HH	22703	286389	0.	71%

191	12. 235	12. 215	12. 260	HH	35307	788717	1.	96%
192	12. 300	12. 260	12. 323	HH	44382	1275023	3.	17%
193	12. 349	12. 323	12. 428	HH	141322	3583163	8.	91%
194	12. 453	12. 428	12. 476	HH	266547	3503099	8.	71%

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195	12. 481	12. 476	12. 500	HH	42810	559424	1. 39%	0. 099%	Manual Integrations APPROVED
196	12. 513	12. 500	12. 535	HH	44818	791873			
197	12. 560	12. 535	12. 577	HH	80928	1291821			
198	12. 600	12. 577	12. 619	HH	75331	1263284			
199	12. 651	12. 619	12. 667	HH	38999	1032243			
200	12. 702	12. 667	12. 718	HH	91385	1742705			
201	12. 728	12. 718	12. 750	HH	59820	923141	2. 30%	0. 163%	
202	12. 774	12. 750	12. 819	HH	108694	2544118	6. 33%	0. 449%	
203	12. 853	12. 819	12. 870	HH	173144	2731134	6. 79%	0. 482%	
204	12. 890	12. 870	12. 916	HH	185686	3397092	8. 45%	0. 600%	
205	12. 940	12. 916	12. 980	HH	110190	3650975	9. 08%	0. 645%	
206	13. 040	12. 980	13. 057	HH	2115724	40197071	100. 00%	7. 098%	
207	13. 074	13. 057	13. 090	HH	53759	828006	2. 06%	0. 146%	
208	13. 108	13. 090	13. 125	HH	46055	852163	2. 12%	0. 150%	
209	13. 143	13. 125	13. 157	HH	60215	997976	2. 48%	0. 176%	
210	13. 193	13. 157	13. 217	HH	166398	3509983	8. 73%	0. 620%	
211	13. 239	13. 217	13. 272	HH	118132	2570555	6. 39%	0. 454%	
212	13. 341	13. 272	13. 355	HH	2023585	38254467	95. 17%	6. 755%	
213	13. 371	13. 355	13. 384	HH	349168	3976831	9. 89%	0. 702%	
214	13. 399	13. 384	13. 427	HH	323440	4123137	10. 26%	0. 728%	
215	13. 449	13. 427	13. 460	HH	61606	1051899	2. 62%	0. 186%	
216	13. 481	13. 460	13. 496	HH	139429	2020509	5. 03%	0. 357%	
217	13. 510	13. 496	13. 535	HH	127387	1854486	4. 61%	0. 327%	
218	13. 574	13. 535	13. 599	HH	187155	3388313	8. 43%	0. 598%	
219	13. 609	13. 599	13. 621	HH	59594	765967	1. 91%	0. 135%	
220	13. 643	13. 621	13. 673	HH	88338	1946596	4. 84%	0. 344%	
221	13. 704	13. 673	13. 721	HH	127532	2170909	5. 40%	0. 383%	
222	13. 730	13. 721	13. 744	HH	73972	942996	2. 35%	0. 167%	
223	13. 770	13. 744	13. 793	HH	241747	4016912	9. 99%	0. 709%	
224	13. 805	13. 793	13. 835	HH	56013	1301068	3. 24%	0. 230%	
225	13. 904	13. 835	13. 937	HH	457702	9720093	24. 18%	1. 716%	
226	13. 966	13. 937	13. 984	HH	79912	1746628	4. 35%	0. 308%	
227	14. 009	13. 984	14. 029	HH	230291	3753732	9. 34%	0. 663%	
228	14. 050	14. 029	14. 069	HH	286966	4096744	10. 19%	0. 723%	
229	14. 086	14. 069	14. 113	HH	142100	2546360	6. 33%	0. 450%	
230	14. 180	14. 113	14. 200	HH	282981	7305591	18. 17%	1. 290%	
231	14. 220	14. 200	14. 259	HH	282578	4596668	11. 44%	0. 812%	
232	14. 292	14. 259	14. 321	HH	116541	3037139	7. 56%	0. 536%	
233	14. 337	14. 321	14. 354	HH	76054	1393811	3. 47%	0. 246%	
234	14. 379	14. 354	14. 392	HH	72743	1465105	3. 64%	0. 259%	
235	14. 408	14. 392	14. 445	HH	68497	1944517	4. 84%	0. 343%	
236	14. 456	14. 445	14. 466	HH	55329	692723	1. 72%	0. 122%	
237	14. 482	14. 466	14. 520	HH	65108	1719848	4. 28%	0. 304%	
238	14. 537	14. 520	14. 552	HH	58457	1016766	2. 53%	0. 180%	
239	14. 607	14. 552	14. 621	HH	119977	4054828	10. 09%	0. 716%	
240	14. 642	14. 621	14. 669	HH	235379	3940737	9. 80%	0. 696%	
241	14. 683	14. 669	14. 696	HH	73825	1133474	2. 82%	0. 200%	
242	14. 719	14. 696	14. 729	HH	99500	1752755	4. 36%	0. 310%	
243	14. 740	14. 729	14. 770	HH	108030	2150398	5. 35%	0. 380%	
244	14. 781	14. 770	14. 791	HH	66980	842608	2. 10%	0. 149%	
245	14. 817	14. 791	14. 837	HH	247134	4233815	10. 53%	0. 748%	
246	14. 846	14. 837	14. 857	HH	102092	1227939	3. 05%	0. 217%	

Instrument : FID_G									
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Manual Integrations APPROVED									
Reviewed By :Yogesh Patel 02/03/2025 Supervised By :Ankita Jodhani 02/03/2025									
					rteres				
247	14. 884	14. 857	14. 906	HH	445443	7263503	18. 07%	1. 283%	
248	14. 924	14. 906	14. 935	HH	161647	2329556	5.		
249	14. 952	14. 935	14. 982	HH	234205	4209348	10.		
250	15. 005	14. 982	15. 023	HH	106556	2135897	5.		
251	15. 056	15. 023	15. 123	HH	206275	6657796	16.		
252	15. 216	15. 123	15. 234	HH	1047783	22263190	55.		
253	15. 265	15. 234	15. 282	HH	1267741	18657482	46. 42%	3. 295%	
254	15. 292	15. 282	15. 322	HH	91031	1890764	4. 70%	0. 334%	
255	15. 369	15. 322	15. 410	HH	359755	8131817	20. 23%	1. 436%	
256	15. 439	15. 410	15. 475	HH	154252	3895508	9. 69%	0. 688%	
257	15. 502	15. 475	15. 521	HH	163943	3117843	7. 76%	0. 551%	
258	15. 541	15. 521	15. 602	HH	158612	5324617	13. 25%	0. 940%	
259	15. 640	15. 602	15. 671	HH	164682	4462108	11. 10%	0. 788%	
260	15. 684	15. 671	15. 715	HH	100749	2193721	5. 46%	0. 387%	
261	15. 736	15. 715	15. 751	HH	80430	1585777	3. 95%	0. 280%	
262	15. 795	15. 751	15. 814	HH	129432	3863472	9. 61%	0. 682%	
263	15. 829	15. 814	15. 846	HH	125296	2161761	5. 38%	0. 382%	
264	15. 877	15. 846	15. 895	HH	331507	5723935	14. 24%	1. 011%	
265	15. 912	15. 895	15. 944	HH	192292	3850037	9. 58%	0. 680%	
266	15. 960	15. 944	15. 990	HH	141254	3202906	7. 97%	0. 566%	
267	16. 031	15. 990	16. 071	HH	245824	7859368	19. 55%	1. 388%	
268	16. 109	16. 071	16. 134	HH	163092	4126215	10. 26%	0. 729%	
269	16. 150	16. 134	16. 170	HH	93198	1807234	4. 50%	0. 319%	
270	16. 194	16. 170	16. 217	HH	141024	2762242	6. 87%	0. 488%	
271	16. 253	16. 217	16. 273	HH	125289	3498992	8. 70%	0. 618%	
272	16. 282	16. 273	16. 307	HH	109174	2162663	5. 38%	0. 382%	
273	16. 311	16. 307	16. 349	HH	105547	2204457	5. 48%	0. 389%	
274	16. 370	16. 349	16. 391	HH	82232	1923311	4. 78%	0. 340%	
275	16. 404	16. 391	16. 416	HH	76845	1117443	2. 78%	0. 197%	
276	16. 430	16. 416	16. 442	HH	78428	1185442	2. 95%	0. 209%	
277	16. 471	16. 442	16. 491	HH	112180	2728610	6. 79%	0. 482%	
278	16. 511	16. 491	16. 530	HH	113928	2220266	5. 52%	0. 392%	
279	16. 554	16. 530	16. 606	HH	135650	4797454	11. 93%	0. 847%	
280	16. 638	16. 606	16. 649	HH	103177	2411128	6. 00%	0. 426%	
281	16. 682	16. 649	16. 707	HH	143301	4101525	10. 20%	0. 724%	
282	16. 734	16. 707	16. 737	HH	131172	2024160	5. 04%	0. 357%	
283	16. 798	16. 737	16. 811	HH	1062214	26208691	65. 20%	4. 628%	
284	16. 819	16. 811	16. 872	HH	759458	8950073	22. 27%	1. 580%	
285	16. 908	16. 872	16. 925	HH	357129	6233199	15. 51%	1. 101%	
286	16. 933	16. 925	16. 951	HH	134950	1856117	4. 62%	0. 328%	
287	16. 963	16. 951	16. 998	HH	108669	2785403	6. 93%	0. 492%	
288	17. 019	16. 998	17. 040	HH	128828	2823036	7. 02%	0. 499%	
289	17. 117	17. 040	17. 137	HH	716904	19211975	47. 79%	3. 393%	
290	17. 184	17. 137	17. 203	HH	1124448	21428172	53. 31%	3. 784%	
291	17. 227	17. 203	17. 238	HH	124871	2404197	5. 98%	0. 425%	
292	17. 265	17. 238	17. 285	HH	489974	7416982	18. 45%	1. 310%	
293	17. 304	17. 285	17. 341	HH	168233	4265006	10. 61%	0. 753%	
Sum of corrected areas: 566302612									

FG011325. M Sat Feb 01 02:11:20 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG013125\  
Data File : FG015276.D  
Signal(s) : FID1A.ch  
Acq On : 31 Jan 2025 12:57  
Operator : YP\AJ  
Sample : Q1232-05  
Misc :  
ALS Vial : 15 Sample Multiplier: 1

Instrument :  
FID\_G  
ClientSampleId :  
JPP-46.1-012925

Integration File: autoint1.e  
Quant Time: Feb 01 01:13:42 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 : Rx1-1ms  
Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
9) S TETRACOSANE-d50 (SURR...)	15.051	1582116	12.334 ug/ml

Target Compounds

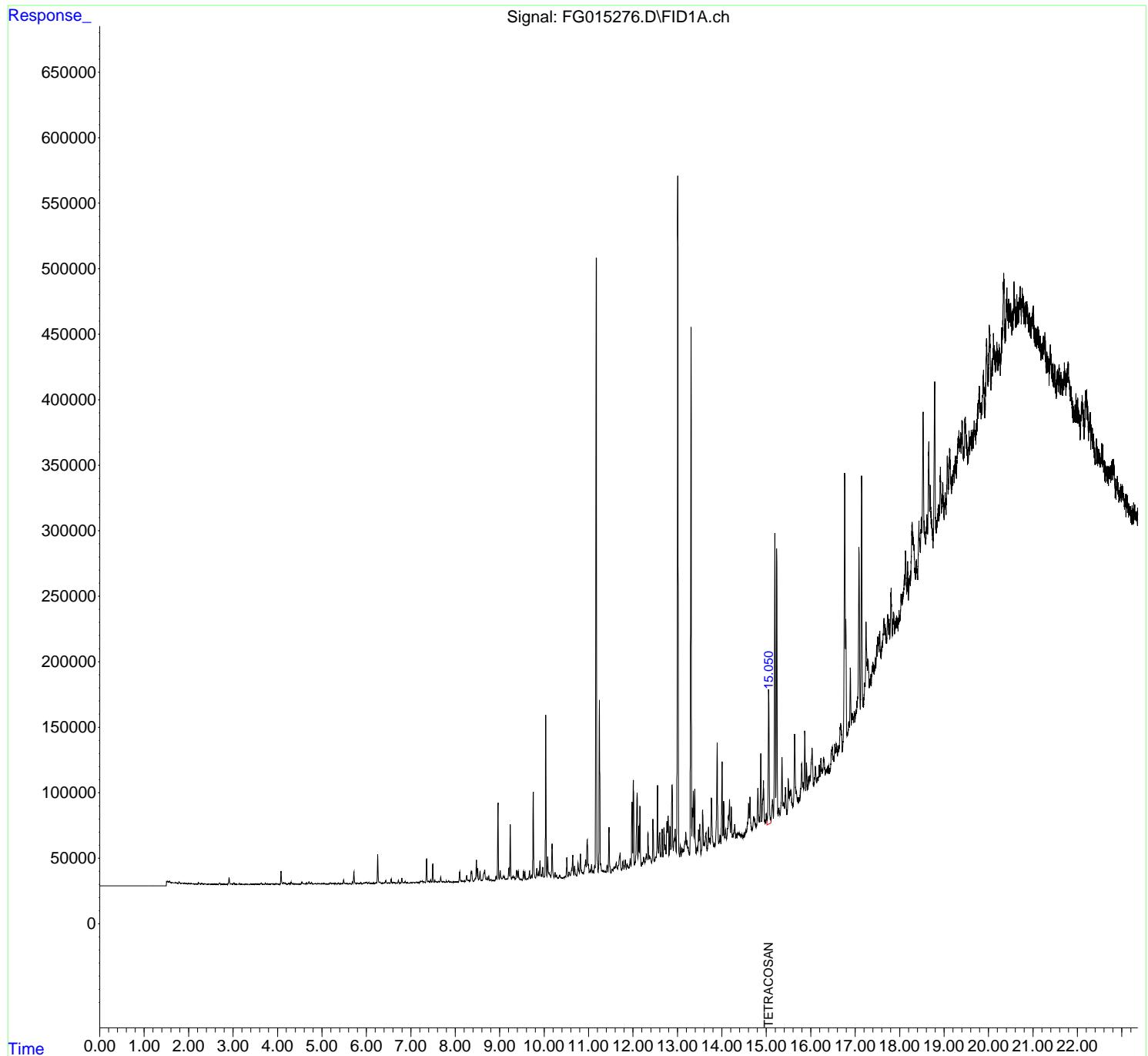
(f)=RT Delta > 1/2 Window (m)=manual int.

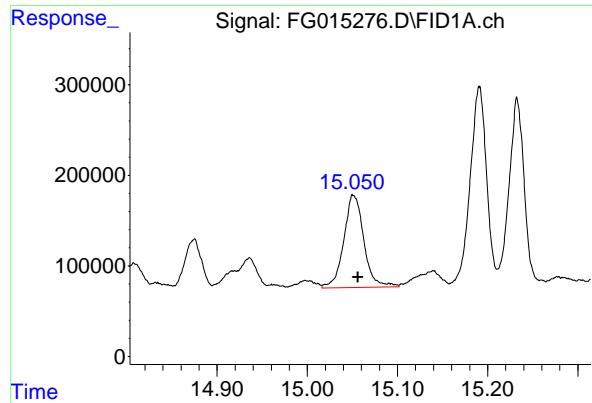
Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG013125\  
Data File : FG015276.D  
Signal(s) : FID1A.ch  
Acq On : 31 Jan 2025 12:57  
Operator : YP\AJ  
Sample : Q1232-05  
Misc :  
ALS Vial : 15 Sample Multiplier: 1

Instrument :  
FID\_G  
ClientSampleId :  
JPP-46.1-012925

Integration File: autoint1.e  
Quant Time: Feb 01 01:13:42 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 : Rx1-1ms  
Signal Info : 20mx0.18mmx0.18um





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 15.051 min  
Delta R.T.: -0.005 min  
Instrument: FID\_G  
Response: 1582116  
Conc: 12.33 ug/ml  
ClientSampleId : JPP-46.1-012925

## rteres

## Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG013125\  
 Data File : FG015276.D  
 Signal(s) : FID1A.ch  
 Acq On : 31 Jan 2025 12:57  
 Sample : Q1232-05  
 Misc :  
 ALS Vial : 15 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	4.370	4.350	4.389	BH	78	-1552	-0.02%	-0.001%
2	4.401	4.389	4.424	PH	-34	-2788	-0.03%	-0.001%
3	4.431	4.424	4.458	PH	-138	-4308	-0.05%	-0.002%
4	4.480	4.458	4.510	PH	-121	-6688	-0.08%	-0.003%
5	4.554	4.510	4.605	PH	1226	17444	0.20%	0.007%
6	4.616	4.605	4.639	PH	186	1448	0.02%	0.001%
7	4.656	4.639	4.682	PH	585	6098	0.07%	0.002%
8	4.709	4.682	4.743	PH	1687	21058	0.24%	0.008%
9	4.767	4.743	4.812	HH	705	8896	0.10%	0.003%
10	4.830	4.812	4.840	PH	99	-505	-0.01%	-0.000%
11	4.859	4.840	4.889	PH	264	1008	0.01%	0.000%
12	4.915	4.889	4.942	PH	266	4276	0.05%	0.002%
13	4.957	4.942	4.977	HH	188	1863	0.02%	0.001%
14	5.019	4.977	5.032	PH	185	3284	0.04%	0.001%
15	5.046	5.032	5.079	HH	410	3469	0.04%	0.001%
16	5.098	5.079	5.121	PH	9	-1557	-0.02%	-0.001%
17	5.128	5.121	5.144	PH	-40	-985	-0.01%	-0.000%
18	5.201	5.144	5.216	PH	782	16880	0.19%	0.007%
19	5.222	5.216	5.238	HH	140	852	0.01%	0.000%
20	5.257	5.238	5.281	PH	549	6300	0.07%	0.002%
21	5.301	5.281	5.316	HH	410	4468	0.05%	0.002%
22	5.330	5.316	5.344	PH	242	1832	0.02%	0.001%
23	5.365	5.344	5.408	PH	697	5983	0.07%	0.002%
24	5.429	5.408	5.446	PH	188	672	0.01%	0.000%
25	5.458	5.446	5.471	PH	72	94	0.00%	0.000%
26	5.488	5.471	5.515	PH	3229	35081	0.39%	0.014%
27	5.526	5.515	5.542	HH	418	4376	0.05%	0.002%
28	5.561	5.542	5.600	HH	569	5164	0.06%	0.002%
29	5.620	5.600	5.650	PH	370	2482	0.03%	0.001%
30	5.652	5.650	5.665	PH	-43	-607	-0.01%	-0.000%
31	5.687	5.665	5.702	PH	1207	15621	0.18%	0.006%
32	5.720	5.702	5.746	HH	9193	96205	1.08%	0.038%
33	5.757	5.746	5.780	HH	735	8378	0.09%	0.003%
34	5.799	5.780	5.841	HH	637	10225	0.12%	0.004%
35	5.874	5.841	5.906	HH	866	13843	0.16%	0.005%
36	5.944	5.906	5.965	PH	968	16600	0.19%	0.007%

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37	5. 978	5. 965	5. 989	HH	1012	11387	0. 13%	0. 004%
38	6. 003	5. 989	6. 035	HH	1317	20854	0. 23%	0. 008%
39	6. 056	6. 035	6. 084	HH	1017	16506	0. 19%	0. 006%
40	6. 098	6. 084	6. 110	HH	507	5799	0. 07%	0. 002%
41	6. 128	6. 110	6. 144	HH	471	7079	0. 08%	0. 003%
42	6. 161	6. 144	6. 184	HH	833	12022	0. 14%	0. 005%
43	6. 199	6. 184	6. 207	HH	459	5160	0. 06%	0. 002%
44	6. 222	6. 207	6. 236	HH	1076	13265	0. 15%	0. 005%
45	6. 256	6. 236	6. 292	HH	22354	240151	2. 70%	0. 094%
46	6. 306	6. 292	6. 334	HH	1491	23875	0. 27%	0. 009%
47	6. 345	6. 334	6. 355	HH	537	6302	0. 07%	0. 002%
48	6. 365	6. 355	6. 383	HH	662	8329	0. 09%	0. 003%
49	6. 408	6. 383	6. 418	HH	912	12731	0. 14%	0. 005%
50	6. 436	6. 418	6. 472	HH	2530	39725	0. 45%	0. 016%
51	6. 489	6. 472	6. 499	HH	785	10802	0. 12%	0. 004%
52	6. 504	6. 499	6. 534	HH	779	13656	0. 15%	0. 005%
53	6. 559	6. 534	6. 587	HH	3662	50501	0. 57%	0. 020%
54	6. 611	6. 587	6. 623	HH	1301	21426	0. 24%	0. 008%
55	6. 633	6. 623	6. 655	HH	981	16072	0. 18%	0. 006%
56	6. 669	6. 655	6. 696	HH	752	14031	0. 16%	0. 006%
57	6. 722	6. 696	6. 772	HH	2737	50071	0. 56%	0. 020%
58	6. 800	6. 772	6. 824	HH	4468	58569	0. 66%	0. 023%
59	6. 835	6. 824	6. 858	HH	904	16936	0. 19%	0. 007%
60	6. 875	6. 858	6. 901	HH	1707	29089	0. 33%	0. 011%
61	6. 911	6. 901	6. 966	HH	1102	29155	0. 33%	0. 011%
62	7. 006	6. 966	7. 021	HH	1231	26954	0. 30%	0. 011%
63	7. 051	7. 021	7. 084	HH	1342	34723	0. 39%	0. 014%
64	7. 088	7. 084	7. 098	HH	878	6433	0. 07%	0. 003%
65	7. 128	7. 098	7. 147	HH	1520	30673	0. 35%	0. 012%
66	7. 170	7. 147	7. 192	HH	1072	25891	0. 29%	0. 010%
67	7. 213	7. 192	7. 244	HH	2109	50309	0. 57%	0. 020%
68	7. 260	7. 244	7. 280	HH	2151	37187	0. 42%	0. 015%
69	7. 297	7. 280	7. 328	HH	1954	38626	0. 43%	0. 015%
70	7. 357	7. 328	7. 382	HH	19316	221264	2. 49%	0. 087%
71	7. 397	7. 382	7. 431	HH	2076	47815	0. 54%	0. 019%
72	7. 447	7. 431	7. 475	HH	3033	51387	0. 58%	0. 020%
73	7. 496	7. 475	7. 523	HH	15450	173980	1. 96%	0. 068%
74	7. 542	7. 523	7. 559	HH	2708	41914	0. 47%	0. 016%
75	7. 572	7. 559	7. 600	HH	1812	36465	0. 41%	0. 014%
76	7. 621	7. 600	7. 640	HH	1976	38218	0. 43%	0. 015%
77	7. 674	7. 640	7. 710	HH	5155	101841	1. 15%	0. 040%
78	7. 734	7. 710	7. 753	HH	1736	40307	0. 45%	0. 016%
79	7. 759	7. 753	7. 772	HH	1429	15060	0. 17%	0. 006%
80	7. 799	7. 772	7. 827	HH	2175	47326	0. 53%	0. 019%
81	7. 850	7. 827	7. 877	HH	2332	50743	0. 57%	0. 020%
82	7. 899	7. 877	7. 919	HH	1640	35796	0. 40%	0. 014%
83	7. 963	7. 919	7. 980	HH	1890	50823	0. 57%	0. 020%
84	7. 993	7. 980	7. 998	HH	1292	13717	0. 15%	0. 005%
85	8. 014	7. 998	8. 031	HH	1683	29925	0. 34%	0. 012%
86	8. 047	8. 031	8. 075	HH	1600	36469	0. 41%	0. 014%
87	8. 100	8. 075	8. 126	HH	9144	136171	1. 53%	0. 053%
88	8. 134	8. 126	8. 150	HH	2486	32894	0. 37%	0. 013%
89	8. 158	8. 150	8. 185	HH	2319	42577	0. 48%	0. 017%

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90	8. 205	8. 185	8. 224	HH	2585	48569	0. 55%	0. 019%	
91	8. 258	8. 224	8. 283	HH	6251	122801	1. 38%	0. 048%	
92	8. 286	8. 283	8. 298	HH	2756	22818	0. 26%	0. 009%	
93	8. 306	8. 298	8. 322	HH	2762	37535	0. 42%	0. 015%	
94	8. 358	8. 322	8. 365	HH	9019	118989	1. 34%	0. 047%	
95	8. 373	8. 365	8. 412	HH	9861	140775	1. 58%	0. 055%	
96	8. 451	8. 412	8. 458	HH	4296	84554	0. 95%	0. 033%	
97	8. 479	8. 458	8. 494	HH	18126	223073	2. 51%	0. 087%	
98	8. 506	8. 494	8. 526	HH	12028	143665	1. 62%	0. 056%	
99	8. 560	8. 526	8. 590	HH	9405	182297	2. 05%	0. 071%	
100	8. 606	8. 590	8. 613	HH	2815	37045	0. 42%	0. 015%	
101	8. 644	8. 613	8. 649	HH	8237	120852	1. 36%	0. 047%	
102	8. 663	8. 649	8. 698	HH	10389	195518	2. 20%	0. 077%	
103	8. 718	8. 698	8. 737	HH	5145	91680	1. 03%	0. 036%	
104	8. 756	8. 737	8. 789	HH	5946	114746	1. 29%	0. 045%	
105	8. 804	8. 789	8. 823	HH	3341	59158	0. 67%	0. 023%	
106	8. 838	8. 823	8. 877	HH	2540	78292	0. 88%	0. 031%	
107	8. 892	8. 877	8. 896	HH	2732	28956	0. 33%	0. 011%	
108	8. 917	8. 896	8. 939	HH	5789	108310	1. 22%	0. 042%	
109	8. 963	8. 939	8. 991	HH	61735	691061	7. 78%	0. 271%	
110	9. 013	8. 991	9. 048	HH	9923	199540	2. 25%	0. 078%	
111	9. 057	9. 048	9. 066	HH	4012	41806	0. 47%	0. 016%	
112	9. 082	9. 066	9. 094	HH	6168	86010	0. 97%	0. 034%	
113	9. 105	9. 094	9. 124	HH	5509	84978	0. 96%	0. 033%	
114	9. 133	9. 124	9. 142	HH	3655	37942	0. 43%	0. 015%	
115	9. 156	9. 142	9. 171	HH	3976	62315	0. 70%	0. 024%	
116	9. 208	9. 171	9. 222	HH	12085	203166	2. 29%	0. 080%	
117	9. 240	9. 222	9. 267	HH	44815	506612	5. 70%	0. 199%	
118	9. 282	9. 267	9. 292	HH	5229	68939	0. 78%	0. 027%	
119	9. 305	9. 292	9. 322	HH	5868	92184	1. 04%	0. 036%	
120	9. 333	9. 322	9. 350	HH	5317	76545	0. 86%	0. 030%	
121	9. 384	9. 350	9. 405	HH	10336	216079	2. 43%	0. 085%	
122	9. 420	9. 405	9. 461	HH	9793	186069	2. 09%	0. 073%	
123	9. 478	9. 461	9. 506	HH	3804	90372	1. 02%	0. 035%	
124	9. 537	9. 506	9. 553	HH	9742	161714	1. 82%	0. 063%	
125	9. 569	9. 553	9. 605	HH	9155	164164	1. 85%	0. 064%	
126	9. 619	9. 605	9. 637	HH	4373	74281	0. 84%	0. 029%	
127	9. 674	9. 637	9. 696	HH	10011	210151	2. 37%	0. 082%	
128	9. 718	9. 696	9. 731	HH	6649	113362	1. 28%	0. 044%	
129	9. 757	9. 731	9. 807	HH	70076	916652	10. 32%	0. 359%	
130	9. 837	9. 807	9. 853	HH	11940	209989	2. 36%	0. 082%	
131	9. 859	9. 853	9. 867	HH	7161	56853	0. 64%	0. 022%	
132	9. 878	9. 867	9. 890	HH	9048	108108	1. 22%	0. 042%	
133	9. 908	9. 890	9. 929	HH	17526	264468	2. 98%	0. 104%	
134	9. 940	9. 929	9. 950	HH	6925	80063	0. 90%	0. 031%	
135	9. 969	9. 950	10. 009	HH	12602	264128	2. 97%	0. 104%	
136	10. 038	10. 009	10. 063	HH	128173	1420003	15. 99%	0. 557%	
137	10. 083	10. 063	10. 102	HH	20758	301656	3. 40%	0. 118%	
138	10. 112	10. 102	10. 152	HH	8561	209999	2. 36%	0. 082%	
139	10. 182	10. 152	10. 226	HH	30394	565192	6. 36%	0. 222%	
140	10. 245	10. 226	10. 264	HH	8659	149370	1. 68%	0. 059%	
141	10. 280	10. 264	10. 309	HH	6898	149636	1. 68%	0. 059%	

					rteres				
142	10. 349	10. 309	10. 402	HH	6697	287892	3. 24%	0. 113%	
143	10. 411	10. 402	10. 418	HH	4541	42251	0. 48%	0. 017%	
144	10. 424	10. 418	10. 428	HH	4524	25637	0. 29%	0. 010%	
145	10. 451	10. 428	10. 461	HH	5368	98816	1. 11%	0. 039%	
146	10. 473	10. 461	10. 490	HH	5727	95310	1. 07%	0. 037%	
147	10. 513	10. 490	10. 542	HH	20133	326575	3. 68%	0. 128%	
148	10. 562	10. 542	10. 588	HH	9062	201420	2. 27%	0. 079%	
149	10. 620	10. 588	10. 627	HH	10779	197004	2. 22%	0. 077%	
150	10. 646	10. 627	10. 669	HH	21758	350607	3. 95%	0. 137%	
151	10. 686	10. 669	10. 731	HH	13550	326147	3. 67%	0. 128%	
152	10. 764	10. 731	10. 798	HH	16102	408917	4. 60%	0. 160%	
153	10. 817	10. 798	10. 857	HH	22681	462278	5. 20%	0. 181%	
154	10. 865	10. 857	10. 884	HH	8738	138445	1. 56%	0. 054%	
155	10. 936	10. 884	10. 948	HH	18439	486068	5. 47%	0. 191%	
156	10. 971	10. 948	11. 014	HH	33571	747306	8. 41%	0. 293%	
157	11. 042	11. 014	11. 052	HH	10456	218752	2. 46%	0. 086%	
158	11. 070	11. 052	11. 087	HH	14782	245654	2. 77%	0. 096%	
159	11. 099	11. 087	11. 120	HH	9966	178422	2. 01%	0. 070%	
160	11. 137	11. 120	11. 145	HH	14109	177155	1. 99%	0. 069%	
161	11. 175	11. 145	11. 217	HH	477718	5523776	62. 18%	2. 166%	
162	11. 245	11. 217	11. 267	HH	140387	1654881	18. 63%	0. 649%	
163	11. 273	11. 267	11. 290	HH	15441	181223	2. 04%	0. 071%	
164	11. 300	11. 290	11. 309	HH	10146	109571	1. 23%	0. 043%	
165	11. 317	11. 309	11. 332	HH	10105	133985	1. 51%	0. 053%	
166	11. 346	11. 332	11. 372	HH	10299	230148	2. 59%	0. 090%	
167	11. 381	11. 372	11. 397	HH	9660	138319	1. 56%	0. 054%	
168	11. 417	11. 397	11. 437	HH	14312	272835	3. 07%	0. 107%	
169	11. 461	11. 437	11. 502	HH	43138	733868	8. 26%	0. 288%	
170	11. 534	11. 502	11. 550	HH	11169	291778	3. 28%	0. 114%	
171	11. 569	11. 550	11. 587	HH	13068	268620	3. 02%	0. 105%	
172	11. 625	11. 587	11. 652	HH	16949	519439	5. 85%	0. 204%	
173	11. 710	11. 652	11. 744	HH	23761	885751	9. 97%	0. 347%	
174	11. 776	11. 744	11. 797	HH	17294	426038	4. 80%	0. 167%	
175	11. 825	11. 797	11. 847	HH	18300	432684	4. 87%	0. 170%	
176	11. 867	11. 847	11. 900	HH	15446	416900	4. 69%	0. 163%	
177	11. 936	11. 900	11. 953	HH	19406	481603	5. 42%	0. 189%	
178	11. 977	11. 953	11. 992	HH	62413	838431	9. 44%	0. 329%	
179	12. 009	11. 992	12. 033	HH	79122	1049114	11. 81%	0. 411%	
180	12. 046	12. 033	12. 052	HH	16540	180314	2. 03%	0. 071%	
181	12. 093	12. 052	12. 110	HH	69426	1360229	15. 31%	0. 533%	
182	12. 127	12. 110	12. 140	HH	43974	585494	6. 59%	0. 230%	
183	12. 157	12. 140	12. 188	HH	58961	913535	10. 28%	0. 358%	
184	12. 205	12. 188	12. 217	HH	16245	265547	2. 99%	0. 104%	
185	12. 240	12. 217	12. 265	HH	20087	508191	5. 72%	0. 199%	
186	12. 301	12. 265	12. 318	HH	22636	615470	6. 93%	0. 241%	
187	12. 337	12. 318	12. 356	HH	39069	622561	7. 01%	0. 244%	
188	12. 368	12. 356	12. 381	HH	21587	302918	3. 41%	0. 119%	
189	12. 389	12. 381	12. 419	HH	20658	416540	4. 69%	0. 163%	
190	12. 450	12. 419	12. 475	HH	49417	925563	10. 42%	0. 363%	
191	12. 483	12. 475	12. 492	HH	18342	189316	2. 13%	0. 074%	
192	12. 510	12. 492	12. 525	HH	20582	388404	4. 37%	0. 152%	
193	12. 552	12. 525	12. 572	HH	75049	1202837	13. 54%	0. 472%	
194	12. 599	12. 572	12. 618	HH	38891	815156	9. 18%	0. 320%	

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195	12. 628	12. 618	12. 634	HH	22899	209171	2. 35%	0. 082%	
196	12. 654	12. 634	12. 674	HH	41806	734819	8. 27%	0. 288%	
197	12. 699	12. 674	12. 716	HH	42893	801134	9. 02%	0. 314%	
198	12. 727	12. 716	12. 741	HH	29869	399580	4. 50%	0. 157%	
199	12. 764	12. 741	12. 779	HH	47437	862082	9. 70%	0. 338%	
200	12. 790	12. 779	12. 809	HH	51734	712500	8. 02%	0. 279%	
201	12. 831	12. 809	12. 853	HH	43502	859561	9. 68%	0. 337%	
202	12. 878	12. 853	12. 905	HH	75140	1465899	16. 50%	0. 575%	
203	12. 948	12. 905	12. 972	HH	41843	1311611	14. 76%	0. 514%	
204	13. 007	12. 972	13. 045	HH	538578	6908358	77. 77%	2. 709%	
205	13. 064	13. 045	13. 082	HH	29261	542922	6. 11%	0. 213%	
206	13. 101	13. 082	13. 115	HH	26994	499408	5. 62%	0. 196%	
207	13. 133	13. 115	13. 143	HH	26522	410950	4. 63%	0. 161%	
208	13. 165	13. 143	13. 172	HH	31354	499710	5. 63%	0. 196%	
209	13. 187	13. 172	13. 201	HH	39172	603031	6. 79%	0. 236%	
210	13. 212	13. 201	13. 232	HH	32834	569886	6. 42%	0. 223%	
211	13. 236	13. 232	13. 272	HH	28107	607525	6. 84%	0. 238%	
212	13. 305	13. 272	13. 324	HH	423876	5299609	59. 66%	2. 078%	
213	13. 336	13. 324	13. 344	HH	57161	599164	6. 74%	0. 235%	
214	13. 357	13. 344	13. 373	HH	70233	975608	10. 98%	0. 383%	
215	13. 388	13. 373	13. 422	HH	72241	1252945	14. 10%	0. 491%	
216	13. 445	13. 422	13. 455	HH	27774	514677	5. 79%	0. 202%	
217	13. 474	13. 455	13. 487	HH	40904	655724	7. 38%	0. 257%	
218	13. 501	13. 487	13. 527	HH	45649	825463	9. 29%	0. 324%	
219	13. 567	13. 527	13. 610	HH	56256	1710668	19. 26%	0. 671%	
220	13. 641	13. 610	13. 667	HH	38660	1108866	12. 48%	0. 435%	
221	13. 697	13. 667	13. 715	HH	42854	972440	10. 95%	0. 381%	
222	13. 725	13. 715	13. 740	HH	35176	490737	5. 52%	0. 192%	
223	13. 764	13. 740	13. 818	HH	65466	1919055	21. 60%	0. 753%	
224	13. 827	13. 818	13. 846	HH	29924	494291	5. 56%	0. 194%	
225	13. 892	13. 846	13. 930	HH	107161	2630840	29. 62%	1. 032%	
226	13. 956	13. 930	13. 975	HH	36928	908516	10. 23%	0. 356%	
227	14. 003	13. 975	14. 023	HH	92266	1676549	18. 87%	0. 657%	
228	14. 039	14. 023	14. 062	HH	62821	1100171	12. 38%	0. 431%	
229	14. 080	14. 062	14. 107	HH	41529	1012987	11. 40%	0. 397%	
230	14. 170	14. 107	14. 191	HH	64397	2378560	26. 78%	0. 933%	
231	14. 210	14. 191	14. 239	HH	58375	1299687	14. 63%	0. 510%	
232	14. 287	14. 239	14. 307	HH	44681	1602602	18. 04%	0. 628%	
233	14. 324	14. 307	14. 342	HH	37647	756283	8. 51%	0. 297%	
234	14. 366	14. 342	14. 393	HH	39050	1163162	13. 09%	0. 456%	
235	14. 398	14. 393	14. 419	HH	37928	591474	6. 66%	0. 232%	
236	14. 424	14. 419	14. 435	HH	37300	357392	4. 02%	0. 140%	
237	14. 450	14. 435	14. 465	HH	37910	647738	7. 29%	0. 254%	
238	14. 482	14. 465	14. 487	HH	36764	485123	5. 46%	0. 190%	
239	14. 512	14. 487	14. 524	HH	38470	823922	9. 27%	0. 323%	
240	14. 536	14. 524	14. 544	HH	40910	488209	5. 50%	0. 191%	
241	14. 602	14. 544	14. 616	HH	61303	2068115	23. 28%	0. 811%	
242	14. 631	14. 616	14. 674	HH	66336	1776259	20. 00%	0. 697%	
243	14. 712	14. 674	14. 723	HH	50629	1349628	15. 19%	0. 529%	
244	14. 733	14. 723	14. 762	HH	49933	1110379	12. 50%	0. 435%	
245	14. 773	14. 762	14. 780	HH	44592	487010	5. 48%	0. 191%	
246	14. 808	14. 780	14. 827	HH	72717	1623181	18. 27%	0. 636%	

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247	14. 832	14. 827	14. 851	HH	51186	713515	8. 03%	0. 280%	
248	14. 875	14. 851	14. 895	HH	99817	1870560	21. 06%	0. 733%	
249	14. 936	14. 895	14. 979	HH	78386	2904871	32. 70%	1. 139%	
250	14. 998	14. 979	15. 016	HH	53472	1140355	12. 84%	0. 447%	
251	15. 051	15. 016	15. 102	HH	147992	3930422	44. 25%	1. 541%	
252	15. 140	15. 102	15. 158	HH	64184	1888606	21. 26%	0. 741%	
253	15. 191	15. 158	15. 211	HH	267999	4306527	48. 48%	1. 689%	
254	15. 233	15. 211	15. 265	HH	255166	3981231	44. 82%	1. 561%	
255	15. 278	15. 265	15. 310	HH	57623	1477098	16. 63%	0. 579%	
256	15. 351	15. 310	15. 373	HH	96471	2630535	29. 61%	1. 032%	
257	15. 385	15. 373	15. 402	HH	61361	1038238	11. 69%	0. 407%	
258	15. 430	15. 402	15. 465	HH	72759	2324439	26. 17%	0. 911%	
259	15. 493	15. 465	15. 516	HH	79769	2041027	22. 98%	0. 800%	
260	15. 529	15. 516	15. 540	HH	70717	1022119	11. 51%	0. 401%	
261	15. 554	15. 540	15. 591	HH	71385	1987019	22. 37%	0. 779%	
262	15. 636	15. 591	15. 666	HH	113778	3553899	40. 01%	1. 394%	
263	15. 677	15. 666	15. 696	HH	70850	1196678	13. 47%	0. 469%	
264	15. 706	15. 696	15. 724	HH	65571	1069569	12. 04%	0. 419%	
265	15. 731	15. 724	15. 754	HH	65742	1151704	12. 96%	0. 452%	
266	15. 795	15. 754	15. 814	HH	91111	2784384	31. 34%	1. 092%	
267	15. 826	15. 814	15. 841	HH	77265	1255028	14. 13%	0. 492%	
268	15. 864	15. 841	15. 885	HH	116771	2384129	26. 84%	0. 935%	
269	15. 903	15. 885	15. 931	HH	91627	2180728	24. 55%	0. 855%	
270	15. 950	15. 931	15. 963	HH	82054	1475726	16. 61%	0. 579%	
271	15. 973	15. 963	15. 987	HH	82654	1176288	13. 24%	0. 461%	
272	16. 029	15. 987	16. 064	HH	103665	4090406	46. 05%	1. 604%	
273	16. 103	16. 064	16. 135	HH	89533	3458752	38. 94%	1. 356%	
274	16. 156	16. 135	16. 166	HH	81363	1484570	16. 71%	0. 582%	
275	16. 189	16. 166	16. 210	HH	90607	2267179	25. 52%	0. 889%	
276	16. 227	16. 210	16. 250	HH	94913	2147238	24. 17%	0. 842%	
277	16. 289	16. 250	16. 294	HH	96036	2316649	26. 08%	0. 908%	
278	16. 299	16. 294	16. 329	HH	95312	1878626	21. 15%	0. 737%	
279	16. 336	16. 329	16. 346	HH	86688	881418	9. 92%	0. 346%	
280	16. 363	16. 346	16. 369	HH	88075	1181455	13. 30%	0. 463%	
281	16. 373	16. 369	16. 390	HH	87977	1124066	12. 65%	0. 441%	
282	16. 403	16. 390	16. 414	HH	89896	1280142	14. 41%	0. 502%	
283	16. 483	16. 414	16. 509	HH	104612	5358247	60. 32%	2. 101%	
284	16. 511	16. 509	16. 520	HH	96992	649213	7. 31%	0. 255%	
285	16. 540	16. 520	16. 557	HH	106614	2236519	25. 18%	0. 877%	
286	16. 580	16. 557	16. 602	HH	106451	2788043	31. 39%	1. 093%	
287	16. 627	16. 602	16. 634	HH	105107	1946202	21. 91%	0. 763%	
288	16. 669	16. 634	16. 709	HH	122261	5075335	57. 13%	1. 990%	
289	16. 763	16. 709	16. 780	HH	312731	7652208	86. 14%	3. 001%	
290	16. 788	16. 780	16. 817	HH	202015	3353571	37. 75%	1. 315%	
291	16. 853	16. 817	16. 860	HH	124012	3060730	34. 45%	1. 200%	
292	16. 863	16. 860	16. 869	HH	123092	599119	6. 74%	0. 235%	
293	16. 890	16. 869	16. 912	HH	164607	3632817	40. 89%	1. 425%	
294	16. 926	16. 912	16. 964	HH	128409	3943925	44. 40%	1. 547%	
295	16. 978	16. 964	16. 994	HH	130910	2286859	25. 74%	0. 897%	
296	17. 011	16. 994	17. 024	HH	132104	2378663	26. 78%	0. 933%	
297	17. 085	17. 024	17. 113	HH	255296	8883302	100. 00%	3. 483%	
298	17. 144	17. 113	17. 187	HH	310983	8197408	92. 28%	3. 214%	
299	17. 244	17. 187	17. 277	HH	199099	8860563	99. 74%	3. 474%	

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300	17. 282	17. 277	17. 328	HH	171618	4921707	55. 40%	1.	930%	
301	17. 342	17. 328	17. 347	HH	156857	1728773	19. 46%	0.	678%	
302	17. 355	17. 347	17. 360	HH	159526	1273386	14. 33%	0.	499%	
					Sum of corrected areas:					255019584

FG011325. M Sat Feb 01 02:12:34 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG013125\  
Data File : FG015277.D  
Signal(s) : FID1A.ch  
Acq On : 31 Jan 2025 13:26  
Operator : YP\AJ  
Sample : Q1232-09  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
FID\_G  
ClientSampleId :  
JPP-42.1-012925

Integration File: autoint1.e  
Quant Time: Feb 01 01:14:08 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 : Rx1-1ms  
Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

9) S TETRACOSANE-d50 (SURR...	15.058	1962733	15.301 ug/ml
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Target Compounds

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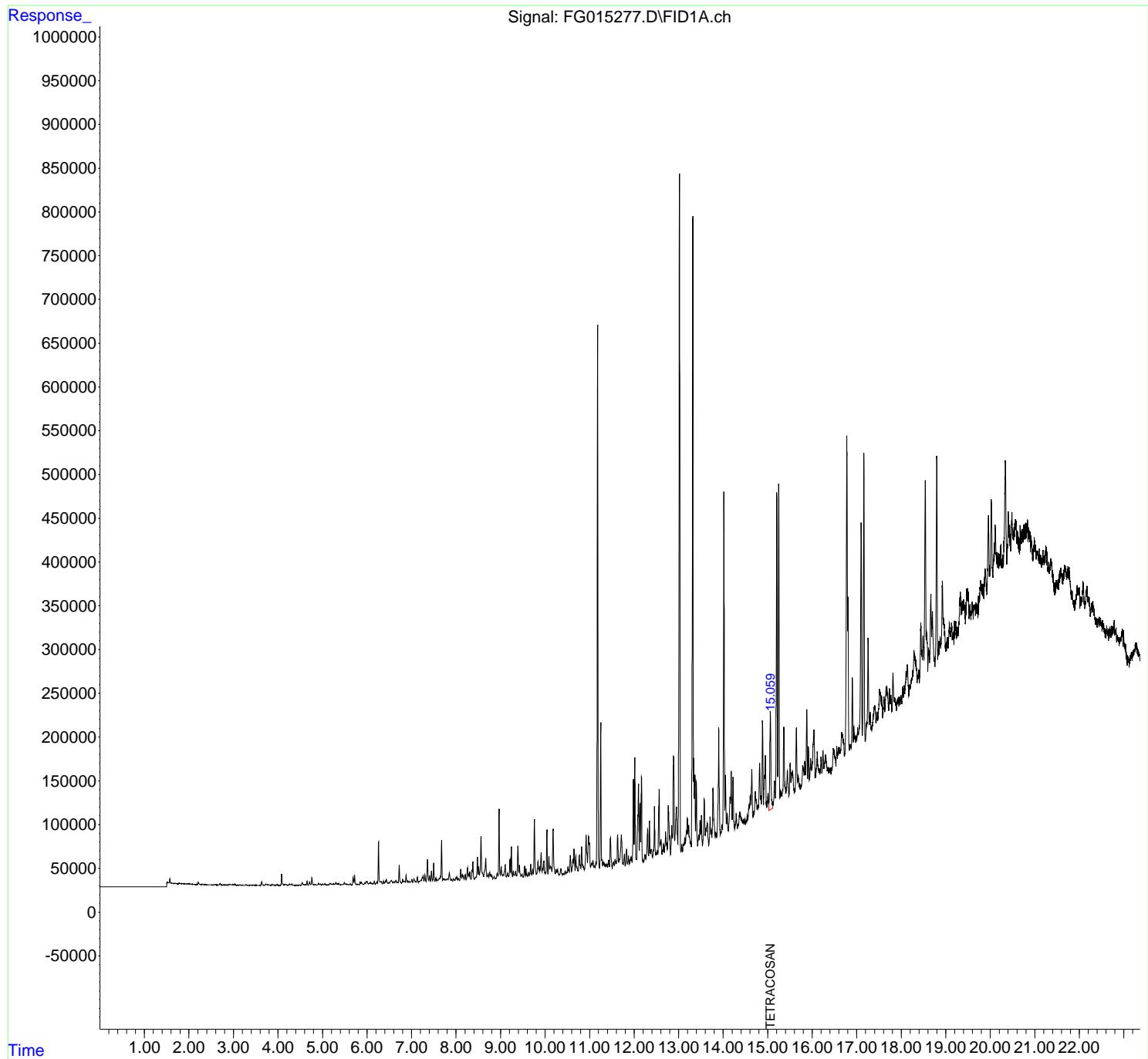
(f)=RT Delta > 1/2 Window (m)=manual int.

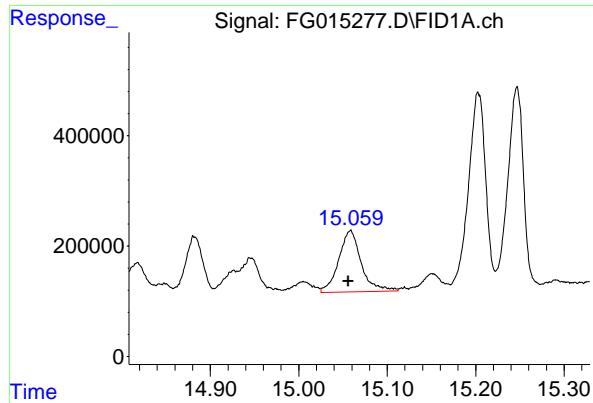
Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG013125\  
Data File : FG015277.D  
Signal(s) : FID1A.ch  
Acq On : 31 Jan 2025 13:26  
Operator : YP\AJ  
Sample : Q1232-09  
Misc :  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
FID\_G  
ClientSampleId :  
JPP-42.1-012925

Integration File: autoint1.e  
Quant Time: Feb 01 01:14:08 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 : Rx1-1ms  
Signal Info : 20mx0.18mmx0.18um





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 15.058 min  
Delta R.T.: 0.002 min  
Instrument:  
Response: 1962733 FID\_G  
Conc: 15.30 ug/ml  
ClientSampleId : JPP-42.1-012925

## rteres

## Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG013125\  
 Data File : FG015277.D  
 Signal (s) : FID1A.ch  
 Acq On : 31 Jan 2025 13:26  
 Sample : Q1232-09  
 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	4.369	4.350	4.391	BH	-12	-2908	-0.02%	-0.001%
2	4.434	4.391	4.466	PH	-44	-10378	-0.08%	-0.002%
3	4.484	4.466	4.512	PH	139	-903	-0.01%	-0.000%
4	4.545	4.512	4.571	PH	2735	39617	0.31%	0.009%
5	4.584	4.571	4.601	HH	1023	9884	0.08%	0.002%
6	4.616	4.601	4.632	PH	507	5335	0.04%	0.001%
7	4.653	4.632	4.681	HH	4628	46736	0.36%	0.011%
8	4.710	4.681	4.736	PH	3578	48897	0.38%	0.011%
9	4.762	4.736	4.812	HH	8065	105711	0.82%	0.024%
10	4.829	4.812	4.842	PH	1020	9754	0.08%	0.002%
11	4.853	4.842	4.872	HH	617	6238	0.05%	0.001%
12	4.911	4.872	4.924	HH	1881	24854	0.19%	0.006%
13	4.929	4.924	4.945	HH	1024	10568	0.08%	0.002%
14	4.962	4.945	4.976	HH	1068	12752	0.10%	0.003%
15	5.003	4.976	5.026	HH	974	17729	0.14%	0.004%
16	5.051	5.026	5.093	HH	1589	26940	0.21%	0.006%
17	5.102	5.093	5.111	HH	216	1330	0.01%	0.000%
18	5.126	5.111	5.144	HH	516	5562	0.04%	0.001%
19	5.163	5.144	5.192	HH	2208	35877	0.28%	0.008%
20	5.203	5.192	5.212	HH	1166	12696	0.10%	0.003%
21	5.223	5.212	5.240	HH	1444	19355	0.15%	0.004%
22	5.256	5.240	5.275	HH	1533	23241	0.18%	0.005%
23	5.301	5.275	5.319	HH	3194	46806	0.36%	0.011%
24	5.332	5.319	5.349	HH	1632	21302	0.17%	0.005%
25	5.366	5.349	5.407	HH	2118	30844	0.24%	0.007%
26	5.422	5.407	5.444	HH	667	9897	0.08%	0.002%
27	5.467	5.444	5.475	HH	977	12946	0.10%	0.003%
28	5.490	5.475	5.514	HH	3086	39874	0.31%	0.009%
29	5.531	5.514	5.547	HH	1537	22113	0.17%	0.005%
30	5.563	5.547	5.580	HH	1269	16662	0.13%	0.004%
31	5.595	5.580	5.605	HH	536	6505	0.05%	0.001%
32	5.623	5.605	5.644	HH	1617	21410	0.17%	0.005%
33	5.654	5.644	5.666	HH	346	3416	0.03%	0.001%
34	5.688	5.666	5.706	HH	8418	104688	0.81%	0.024%
35	5.721	5.706	5.755	HH	11824	134895	1.05%	0.031%
36	5.763	5.755	5.779	HH	1033	11232	0.09%	0.003%

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37	5. 797	5. 779	5. 828	HH	1022	22344	0. 17%	0. 005%
38	5. 847	5. 828	5. 860	HH	3743	41766	0. 32%	0. 010%
39	5. 875	5. 860	5. 905	HH	3311	57544	0. 45%	0. 013%
40	5. 915	5. 905	5. 925	HH	1088	11583	0. 09%	0. 003%
41	5. 954	5. 925	5. 966	HH	2691	43692	0. 34%	0. 010%
42	5. 981	5. 966	5. 987	HH	4063	39636	0. 31%	0. 009%
43	6. 000	5. 987	6. 031	HH	4400	78562	0. 61%	0. 018%
44	6. 057	6. 031	6. 065	HH	2577	36918	0. 29%	0. 008%
45	6. 077	6. 065	6. 091	HH	3396	40695	0. 32%	0. 009%
46	6. 097	6. 091	6. 111	HH	2032	21416	0. 17%	0. 005%
47	6. 124	6. 111	6. 142	HH	2026	30019	0. 23%	0. 007%
48	6. 162	6. 142	6. 187	HH	4162	66891	0. 52%	0. 015%
49	6. 222	6. 187	6. 238	HH	3880	69775	0. 54%	0. 016%
50	6. 259	6. 238	6. 297	HH	49530	550833	4. 27%	0. 125%
51	6. 320	6. 297	6. 343	HH	4169	88509	0. 69%	0. 020%
52	6. 367	6. 343	6. 386	HH	4375	70050	0. 54%	0. 016%
53	6. 410	6. 386	6. 421	HH	4436	68407	0. 53%	0. 016%
54	6. 434	6. 421	6. 474	HH	6562	129195	1. 00%	0. 029%
55	6. 491	6. 474	6. 504	HH	3157	44825	0. 35%	0. 010%
56	6. 527	6. 504	6. 536	HH	4634	71228	0. 55%	0. 016%
57	6. 549	6. 536	6. 579	HH	5264	109114	0. 85%	0. 025%
58	6. 597	6. 579	6. 624	HH	3714	83170	0. 65%	0. 019%
59	6. 647	6. 624	6. 664	HH	5266	96748	0. 75%	0. 022%
60	6. 669	6. 664	6. 681	HH	3321	31798	0. 25%	0. 007%
61	6. 689	6. 681	6. 702	HH	3093	37450	0. 29%	0. 009%
62	6. 724	6. 702	6. 778	HH	22798	340117	2. 64%	0. 077%
63	6. 802	6. 778	6. 823	HH	6550	115503	0. 90%	0. 026%
64	6. 846	6. 823	6. 860	HH	4585	91676	0. 71%	0. 021%
65	6. 878	6. 860	6. 904	HH	11353	170890	1. 33%	0. 039%
66	6. 918	6. 904	6. 939	HH	5162	89032	0. 69%	0. 020%
67	6. 951	6. 939	6. 964	HH	4299	55937	0. 43%	0. 013%
68	7. 008	6. 964	7. 028	HH	6434	160974	1. 25%	0. 037%
69	7. 053	7. 028	7. 084	HH	7370	171807	1. 33%	0. 039%
70	7. 091	7. 084	7. 103	HH	4144	44629	0. 35%	0. 010%
71	7. 131	7. 103	7. 157	HH	9217	180669	1. 40%	0. 041%
72	7. 213	7. 157	7. 221	HH	5528	173870	1. 35%	0. 040%
73	7. 242	7. 221	7. 247	HH	8789	113041	0. 88%	0. 026%
74	7. 258	7. 247	7. 279	HH	10570	161451	1. 25%	0. 037%
75	7. 300	7. 279	7. 327	HH	11909	208164	1. 61%	0. 047%
76	7. 360	7. 327	7. 389	HH	29817	491278	3. 81%	0. 112%
77	7. 407	7. 389	7. 429	HH	10931	178406	1. 38%	0. 041%
78	7. 449	7. 429	7. 479	HH	16472	271569	2. 11%	0. 062%
79	7. 499	7. 479	7. 528	HH	25416	353536	2. 74%	0. 081%
80	7. 548	7. 528	7. 566	HH	8456	144232	1. 12%	0. 033%
81	7. 579	7. 566	7. 590	HH	6076	81259	0. 63%	0. 019%
82	7. 595	7. 590	7. 606	HH	5752	54252	0. 42%	0. 012%
83	7. 623	7. 606	7. 632	HH	7987	110778	0. 86%	0. 025%
84	7. 653	7. 632	7. 658	HH	10576	136988	1. 06%	0. 031%
85	7. 676	7. 658	7. 700	HH	51411	610307	4. 73%	0. 139%
86	7. 716	7. 700	7. 722	HH	6913	82836	0. 64%	0. 019%
87	7. 731	7. 722	7. 753	HH	7022	123652	0. 96%	0. 028%
88	7. 764	7. 753	7. 777	HH	6467	86208	0. 67%	0. 020%
89	7. 801	7. 777	7. 819	HH	7476	169477	1. 31%	0. 039%

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90	7. 850	7. 819	7. 884	HH	14064	353176	2. 74%	0. 080%	
91	7. 901	7. 884	7. 922	HH	6732	131372	1. 02%	0. 030%	
92	7. 943	7. 922	7. 958	HH	6953	127084	0. 99%	0. 029%	
93	7. 966	7. 958	7. 979	HH	6174	73404	0. 57%	0. 017%	
94	7. 994	7. 979	8. 002	HH	8179	100431	0. 78%	0. 023%	
95	8. 016	8. 002	8. 034	HH	9447	154566	1. 20%	0. 035%	
96	8. 049	8. 034	8. 081	HH	7861	182281	1. 41%	0. 042%	
97	8. 105	8. 081	8. 125	HH	18213	295604	2. 29%	0. 067%	
98	8. 140	8. 125	8. 153	HH	12009	173874	1. 35%	0. 040%	
99	8. 163	8. 153	8. 183	HH	11112	164806	1. 28%	0. 038%	
100	8. 207	8. 183	8. 226	HH	12023	228317	1. 77%	0. 052%	
101	8. 258	8. 226	8. 278	HH	19639	388118	3. 01%	0. 088%	
102	8. 288	8. 278	8. 299	HH	12396	142913	1. 11%	0. 033%	
103	8. 311	8. 299	8. 338	HH	15543	248040	1. 92%	0. 056%	
104	8. 379	8. 338	8. 413	HH	26678	604304	4. 69%	0. 138%	
105	8. 447	8. 413	8. 455	HH	9392	210561	1. 63%	0. 048%	
106	8. 482	8. 455	8. 498	HH	31985	471925	3. 66%	0. 107%	
107	8. 510	8. 498	8. 525	HH	21210	266446	2. 07%	0. 061%	
108	8. 561	8. 525	8. 621	HH	55619	1208061	9. 37%	0. 275%	
109	8. 668	8. 621	8. 699	HH	30644	798777	6. 20%	0. 182%	
110	8. 721	8. 699	8. 737	HH	12879	251965	1. 95%	0. 057%	
111	8. 758	8. 737	8. 773	HH	14762	256477	1. 99%	0. 058%	
112	8. 783	8. 773	8. 798	HH	12035	164032	1. 27%	0. 037%	
113	8. 807	8. 798	8. 826	HH	10874	158907	1. 23%	0. 036%	
114	8. 859	8. 826	8. 880	HH	9515	268857	2. 09%	0. 061%	
115	8. 894	8. 880	8. 904	HH	8286	108912	0. 84%	0. 025%	
116	8. 922	8. 904	8. 945	HH	13478	271086	2. 10%	0. 062%	
117	8. 968	8. 945	8. 997	HH	87028	1096841	8. 51%	0. 250%	
118	9. 016	8. 997	9. 047	HH	20688	430732	3. 34%	0. 098%	
119	9. 061	9. 047	9. 071	HH	12190	168862	1. 31%	0. 038%	
120	9. 105	9. 071	9. 127	HH	23467	529182	4. 11%	0. 121%	
121	9. 159	9. 127	9. 178	HH	13733	340479	2. 64%	0. 078%	
122	9. 212	9. 178	9. 227	HH	29346	516048	4. 00%	0. 118%	
123	9. 244	9. 227	9. 270	HH	44089	618542	4. 80%	0. 141%	
124	9. 287	9. 270	9. 303	HH	16058	264275	2. 05%	0. 060%	
125	9. 337	9. 303	9. 354	HH	15617	377629	2. 93%	0. 086%	
126	9. 391	9. 354	9. 412	HH	44815	803539	6. 23%	0. 183%	
127	9. 424	9. 412	9. 464	HH	22854	466062	3. 62%	0. 106%	
128	9. 482	9. 464	9. 505	HH	12611	272290	2. 11%	0. 062%	
129	9. 541	9. 505	9. 558	HH	21659	446896	3. 47%	0. 102%	
130	9. 573	9. 558	9. 592	HH	18898	286874	2. 23%	0. 065%	
131	9. 597	9. 592	9. 607	HH	11140	96385	0. 75%	0. 022%	
132	9. 625	9. 607	9. 644	HH	14785	268801	2. 09%	0. 061%	
133	9. 679	9. 644	9. 701	HH	23867	533978	4. 14%	0. 122%	
134	9. 722	9. 701	9. 738	HH	17713	317410	2. 46%	0. 072%	
135	9. 761	9. 738	9. 804	HH	75136	1235732	9. 59%	0. 281%	
136	9. 841	9. 804	9. 872	HH	26777	752077	5. 83%	0. 171%	
137	9. 884	9. 872	9. 895	HH	21648	270722	2. 10%	0. 062%	
138	9. 913	9. 895	9. 932	HH	37468	588248	4. 56%	0. 134%	
139	9. 944	9. 932	9. 954	HH	18578	226820	1. 76%	0. 052%	
140	9. 973	9. 954	9. 995	HH	27878	509991	3. 96%	0. 116%	
141	10. 003	9. 995	10. 017	HH	14602	187473	1. 45%	0. 043%	

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142	10. 042	10. 017	10. 065	HH	63456	892331	6. 92%	0. 203%	
143	10. 087	10. 065	10. 108	HH	32821	567851	4. 41%	0. 129%	
144	10. 121	10. 108	10. 154	HH	21842	539315	4. 18%	0. 123%	
145	10. 181	10. 154	10. 229	HH	64384	1352350	10. 49%	0. 308%	
146	10. 249	10. 229	10. 267	HH	18301	362014	2. 81%	0. 082%	
147	10. 283	10. 267	10. 320	HH	17579	447882	3. 47%	0. 102%	
148	10. 356	10. 320	10. 383	HH	18831	562399	4. 36%	0. 128%	
149	10. 389	10. 383	10. 406	HH	13072	171471	1. 33%	0. 039%	
150	10. 418	10. 406	10. 429	HH	12698	168176	1. 30%	0. 038%	
151	10. 454	10. 429	10. 469	HH	16231	340591	2. 64%	0. 078%	
152	10. 484	10. 469	10. 495	HH	14850	227444	1. 76%	0. 052%	
153	10. 514	10. 495	10. 545	HH	20959	509556	3. 95%	0. 116%	
154	10. 568	10. 545	10. 595	HH	34082	708364	5. 50%	0. 161%	
155	10. 624	10. 595	10. 636	HH	29260	560021	4. 34%	0. 128%	
156	10. 651	10. 636	10. 675	HH	41448	699114	5. 42%	0. 159%	
157	10. 692	10. 675	10. 710	HH	33276	525866	4. 08%	0. 120%	
158	10. 716	10. 710	10. 744	HH	21056	364228	2. 83%	0. 083%	
159	10. 769	10. 744	10. 787	HH	33967	652443	5. 06%	0. 149%	
160	10. 790	10. 787	10. 803	HH	23115	206175	1. 60%	0. 047%	
161	10. 822	10. 803	10. 860	HH	44015	956815	7. 42%	0. 218%	
162	10. 865	10. 860	10. 884	HH	20626	284715	2. 21%	0. 065%	
163	10. 922	10. 884	10. 954	HH	57042	1429617	11. 09%	0. 326%	
164	10. 976	10. 954	10. 992	HH	55872	996562	7. 73%	0. 227%	
165	10. 997	10. 992	11. 020	HH	47422	613674	4. 76%	0. 140%	
166	11. 049	11. 020	11. 061	HH	24483	564737	4. 38%	0. 129%	
167	11. 076	11. 061	11. 095	HH	27850	493407	3. 83%	0. 112%	
168	11. 109	11. 095	11. 125	HH	21797	376465	2. 92%	0. 086%	
169	11. 143	11. 125	11. 152	HH	27002	385445	2. 99%	0. 088%	
170	11. 181	11. 152	11. 222	HH	637419	7641553	59. 28%	1. 741%	
171	11. 252	11. 222	11. 273	HH	185938	2346938	18. 21%	0. 535%	
172	11. 277	11. 273	11. 295	HH	28959	338580	2. 63%	0. 077%	
173	11. 315	11. 295	11. 336	HH	25700	599900	4. 65%	0. 137%	
174	11. 345	11. 336	11. 369	HH	23457	438589	3. 40%	0. 100%	
175	11. 381	11. 369	11. 408	HH	23560	522739	4. 06%	0. 119%	
176	11. 424	11. 408	11. 446	HH	27929	567220	4. 40%	0. 129%	
177	11. 467	11. 446	11. 510	HH	53876	1226032	9. 51%	0. 279%	
178	11. 538	11. 510	11. 555	HH	26329	647303	5. 02%	0. 147%	
179	11. 574	11. 555	11. 595	HH	29221	633790	4. 92%	0. 144%	
180	11. 630	11. 595	11. 653	HH	57736	1238279	9. 61%	0. 282%	
181	11. 672	11. 653	11. 679	HH	29989	439158	3. 41%	0. 100%	
182	11. 715	11. 679	11. 756	HH	57580	1749372	13. 57%	0. 398%	
183	11. 781	11. 756	11. 804	HH	35092	806721	6. 26%	0. 184%	
184	11. 830	11. 804	11. 852	HH	40667	912094	7. 08%	0. 208%	
185	11. 874	11. 852	11. 899	HH	32945	776101	6. 02%	0. 177%	
186	11. 937	11. 899	11. 955	HH	31721	968013	7. 51%	0. 220%	
187	11. 984	11. 955	11. 999	HH	121022	1731369	13. 43%	0. 394%	
188	12. 016	11. 999	12. 054	HH	145164	2221445	17. 23%	0. 506%	
189	12. 100	12. 054	12. 116	HH	115241	2499137	19. 39%	0. 569%	
190	12. 133	12. 116	12. 148	HH	92548	1293252	10. 03%	0. 295%	
191	12. 164	12. 148	12. 199	HH	123660	1960955	15. 21%	0. 447%	
192	12. 209	12. 199	12. 220	HH	28910	348417	2. 70%	0. 079%	
193	12. 243	12. 220	12. 261	HH	34742	793360	6. 16%	0. 181%	
194	12. 303	12. 261	12. 325	HH	63694	1659593	12. 88%	0. 378%	

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195	12. 346	12. 325	12. 365	HH	73472	1195770	9. 28%	0. 272%	
196	12. 385	12. 365	12. 411	HH	40594	1046810	8. 12%	0. 238%	
197	12. 457	12. 411	12. 478	HH	89809	1992083	15. 45%	0. 454%	
198	12. 492	12. 478	12. 503	HH	36860	537704	4. 17%	0. 122%	
199	12. 519	12. 503	12. 531	HH	39090	635829	4. 93%	0. 145%	
200	12. 560	12. 531	12. 579	HH	109527	1942499	15. 07%	0. 442%	
201	12. 586	12. 579	12. 591	HH	47232	341425	2. 65%	0. 078%	
202	12. 603	12. 591	12. 622	HH	51320	853807	6. 62%	0. 194%	
203	12. 662	12. 622	12. 677	HH	47088	1326438	10. 29%	0. 302%	
204	12. 707	12. 677	12. 745	HH	60806	1966921	15. 26%	0. 448%	
205	12. 770	12. 745	12. 818	HH	90971	2615500	20. 29%	0. 596%	
206	12. 843	12. 818	12. 858	HH	67772	1257872	9. 76%	0. 287%	
207	12. 886	12. 858	12. 911	HH	146892	3003697	23. 30%	0. 684%	
208	12. 948	12. 911	12. 983	HH	88703	2924457	22. 69%	0. 666%	
209	13. 019	12. 983	13. 052	HH	809215	11616431	90. 12%	2. 646%	
210	13. 071	13. 052	13. 090	HH	46612	956325	7. 42%	0. 218%	
211	13. 104	13. 090	13. 110	HH	46940	529068	4. 10%	0. 121%	
212	13. 140	13. 110	13. 153	HH	53208	1244926	9. 66%	0. 284%	
213	13. 171	13. 153	13. 179	HH	62474	898693	6. 97%	0. 205%	
214	13. 195	13. 179	13. 210	HH	75965	1239521	9. 62%	0. 282%	
215	13. 224	13. 210	13. 262	HH	68164	1783709	13. 84%	0. 406%	
216	13. 268	13. 262	13. 283	HH	50003	592694	4. 60%	0. 135%	
217	13. 319	13. 283	13. 335	HH	764009	10192207	79. 07%	2. 322%	
218	13. 342	13. 335	13. 355	HH	144039	1511310	11. 72%	0. 344%	
219	13. 365	13. 355	13. 380	HH	126077	1554256	12. 06%	0. 354%	
220	13. 396	13. 380	13. 425	HH	117478	2086449	16. 19%	0. 475%	
221	13. 448	13. 425	13. 464	HH	57003	1203872	9. 34%	0. 274%	
222	13. 481	13. 464	13. 495	HH	74013	1180583	9. 16%	0. 269%	
223	13. 510	13. 495	13. 532	HH	79428	1441787	11. 19%	0. 328%	
224	13. 574	13. 532	13. 596	HH	97136	2625556	20. 37%	0. 598%	
225	13. 615	13. 596	13. 625	HH	65185	1077214	8. 36%	0. 245%	
226	13. 642	13. 625	13. 677	HH	70846	1861980	14. 45%	0. 424%	
227	13. 705	13. 677	13. 722	HH	77985	1669891	12. 96%	0. 380%	
228	13. 733	13. 722	13. 746	HH	62415	862440	6. 69%	0. 196%	
229	13. 770	13. 746	13. 829	HH	109111	3715902	28. 83%	0. 846%	
230	13. 843	13. 829	13. 855	HH	58679	913562	7. 09%	0. 208%	
231	13. 900	13. 855	13. 933	HH	179622	4524471	35. 10%	1. 031%	
232	13. 972	13. 933	13. 985	HH	68636	1974860	15. 32%	0. 450%	
233	14. 017	13. 985	14. 037	HH	450098	6755611	52. 41%	1. 539%	
234	14. 050	14. 037	14. 070	HH	125640	1944857	15. 09%	0. 443%	
235	14. 090	14. 070	14. 111	HH	81114	1767825	13. 72%	0. 403%	
236	14. 154	14. 111	14. 165	HH	101003	2663858	20. 67%	0. 607%	
237	14. 180	14. 165	14. 200	HH	130228	2171172	16. 84%	0. 495%	
238	14. 220	14. 200	14. 258	HH	123179	3029993	23. 51%	0. 690%	
239	14. 293	14. 258	14. 318	HH	81141	2549918	19. 78%	0. 581%	
240	14. 334	14. 318	14. 343	HH	69926	1048305	8. 13%	0. 239%	
241	14. 378	14. 343	14. 404	HH	82456	2808651	21. 79%	0. 640%	
242	14. 408	14. 404	14. 436	HH	76329	1421906	11. 03%	0. 324%	
243	14. 454	14. 436	14. 470	HH	75654	1476329	11. 45%	0. 336%	
244	14. 488	14. 470	14. 501	HH	75301	1357591	10. 53%	0. 309%	
245	14. 543	14. 501	14. 554	HH	79366	2381452	18. 48%	0. 542%	
246	14. 579	14. 554	14. 584	HH	90848	1486352	11. 53%	0. 339%	

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247	14. 607	14. 584	14. 621	HH	101801	2146086	16. 65%	0. 489%	
248	14. 641	14. 621	14. 676	HH	131514	3267561	25. 35%	0. 744%	
249	14. 685	14. 676	14. 692	HH	83022	779956	6. 05%	0. 178%	
250	14. 720	14. 692	14. 733	HH	106147	2355443	18. 27%	0. 537%	
251	14. 736	14. 733	14. 762	HH	97386	1636256	12. 69%	0. 373%	
252	14. 786	14. 762	14. 790	HH	91361	1517123	11. 77%	0. 346%	
253	14. 818	14. 790	14. 838	HH	139573	3254261	25. 25%	0. 741%	
254	14. 848	14. 838	14. 858	HH	101154	1166846	9. 05%	0. 266%	
255	14. 882	14. 858	14. 904	HH	184775	3712204	28. 80%	0. 846%	
256	14. 945	14. 904	14. 981	HH	146708	5256152	40. 78%	1. 197%	
257	15. 005	14. 981	15. 025	HH	104955	2559126	19. 85%	0. 583%	
258	15. 058	15. 025	15. 112	HH	197979	6474708	50. 23%	1. 475%	
259	15. 120	15. 112	15. 125	HH	95136	692257	5. 37%	0. 158%	
260	15. 151	15. 125	15. 172	HH	118861	2998292	23. 26%	0. 683%	
261	15. 203	15. 172	15. 223	HH	447390	7595884	58. 93%	1. 730%	
262	15. 247	15. 223	15. 274	HH	458851	7346156	56. 99%	1. 673%	
263	15. 291	15. 274	15. 322	HH	107904	3013837	23. 38%	0. 686%	
264	15. 362	15. 322	15. 384	HH	180695	4866855	37. 76%	1. 109%	
265	15. 388	15. 384	15. 413	HH	115470	1927444	14. 95%	0. 439%	
266	15. 440	15. 413	15. 474	HH	130666	4267830	33. 11%	0. 972%	
267	15. 503	15. 474	15. 521	HH	137933	3425318	26. 57%	0. 780%	
268	15. 540	15. 521	15. 547	HH	128347	1918345	14. 88%	0. 437%	
269	15. 559	15. 547	15. 602	HH	130155	3889326	30. 17%	0. 886%	
270	15. 609	15. 602	15. 615	HH	108486	847414	6. 57%	0. 193%	
271	15. 642	15. 615	15. 674	HH	177707	4858199	37. 69%	1. 107%	
272	15. 686	15. 674	15. 729	HH	124873	3873197	30. 05%	0. 882%	
273	15. 790	15. 729	15. 815	HH	136056	6348562	49. 25%	1. 446%	
274	15. 831	15. 815	15. 853	HH	140208	3010072	23. 35%	0. 686%	
275	15. 876	15. 853	15. 895	HH	200705	4104352	31. 84%	0. 935%	
276	15. 913	15. 895	15. 936	HH	158057	3393232	26. 33%	0. 773%	
277	15. 961	15. 936	15. 992	HH	144654	4461400	34. 61%	1. 016%	
278	16. 037	15. 992	16. 075	HH	176793	7371036	57. 19%	1. 679%	
279	16. 112	16. 075	16. 150	HH	151875	6110947	47. 41%	1. 392%	
280	16. 157	16. 150	16. 165	HH	132521	1240927	9. 63%	0. 283%	
281	16. 169	16. 165	16. 176	HH	131192	836519	6. 49%	0. 191%	
282	16. 197	16. 176	16. 216	HH	146252	3254156	25. 25%	0. 741%	
283	16. 238	16. 216	16. 267	HH	153397	4332633	33. 61%	0. 987%	
284	16. 299	16. 267	16. 338	HH	148900	5977032	46. 37%	1. 361%	
285	16. 343	16. 338	16. 350	HH	134520	941501	7. 30%	0. 214%	
286	16. 353	16. 350	16. 361	HH	133481	847126	6. 57%	0. 193%	
287	16. 373	16. 361	16. 390	HH	134056	2275401	17. 65%	0. 518%	
288	16. 404	16. 390	16. 420	HH	133239	2322961	18. 02%	0. 529%	
289	16. 472	16. 420	16. 531	HH	156129	9540629	74. 02%	2. 173%	
290	16. 550	16. 531	16. 566	HH	157442	3110407	24. 13%	0. 708%	
291	16. 587	16. 566	16. 601	HH	156627	3216381	24. 95%	0. 733%	
292	16. 608	16. 601	16. 625	HH	157525	2151225	16. 69%	0. 490%	
293	16. 662	16. 625	16. 667	HH	174269	4109583	31. 88%	0. 936%	
294	16. 670	16. 667	16. 695	HH	174282	2872610	22. 29%	0. 654%	
295	16. 699	16. 695	16. 727	HH	166237	2973200	23. 07%	0. 677%	
296	16. 776	16. 727	16. 793	HH	512537	11682075	90. 63%	2. 661%	
297	16. 801	16. 793	16. 843	HH	329076	6385840	49. 54%	1. 455%	
298	16. 850	16. 843	16. 876	HH	160990	3177854	24. 65%	0. 724%	
299	16. 900	16. 876	16. 922	HH	236982	5302499	41. 14%	1. 208%	

						rteres			
300	16. 938	16. 922	16. 976	HH	180108	5549746	43. 06%	1. 264%	
301	16. 983	16. 976	16. 987	HH	167884	1058359	8. 21%	0. 241%	
302	16. 991	16. 987	16. 999	HH	169785	1204479	9. 34%	0. 274%	
303	17. 020	16. 999	17. 033	HH	179541	3533237	27. 41%	0. 805%	
304	17. 098	17. 033	17. 124	HH	413442	12889642	100. 00%	2. 936%	
305	17. 159	17. 124	17. 189	HH	493563	11029952	85. 57%	2. 512%	
306	17. 253	17. 189	17. 284	HH	282475	11370631	88. 22%	2. 590%	
307	17. 301	17. 284	17. 338	HH	197848	6058526	47. 00%	1. 380%	
					Sum of corrected areas:	439028444			

FG011325. M Sat Feb 01 02:13:42 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG013125\  
Data File : FG015278.D  
Signal(s) : FID1A.ch  
Acq On : 31 Jan 2025 13:54  
Operator : YP\AJ  
Sample : Q1232-13  
Misc :  
ALS Vial : 17 Sample Multiplier: 1

Instrument :  
FID\_G  
ClientSampleId :  
JPP-42.2-012925

Integration File: autoint1.e  
Quant Time: Feb 01 01:14:32 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 : Rx1-1ms  
Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

9) S TETRACOSANE-d50 (SURR...	15.061	2804381	21.862 ug/ml
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Target Compounds

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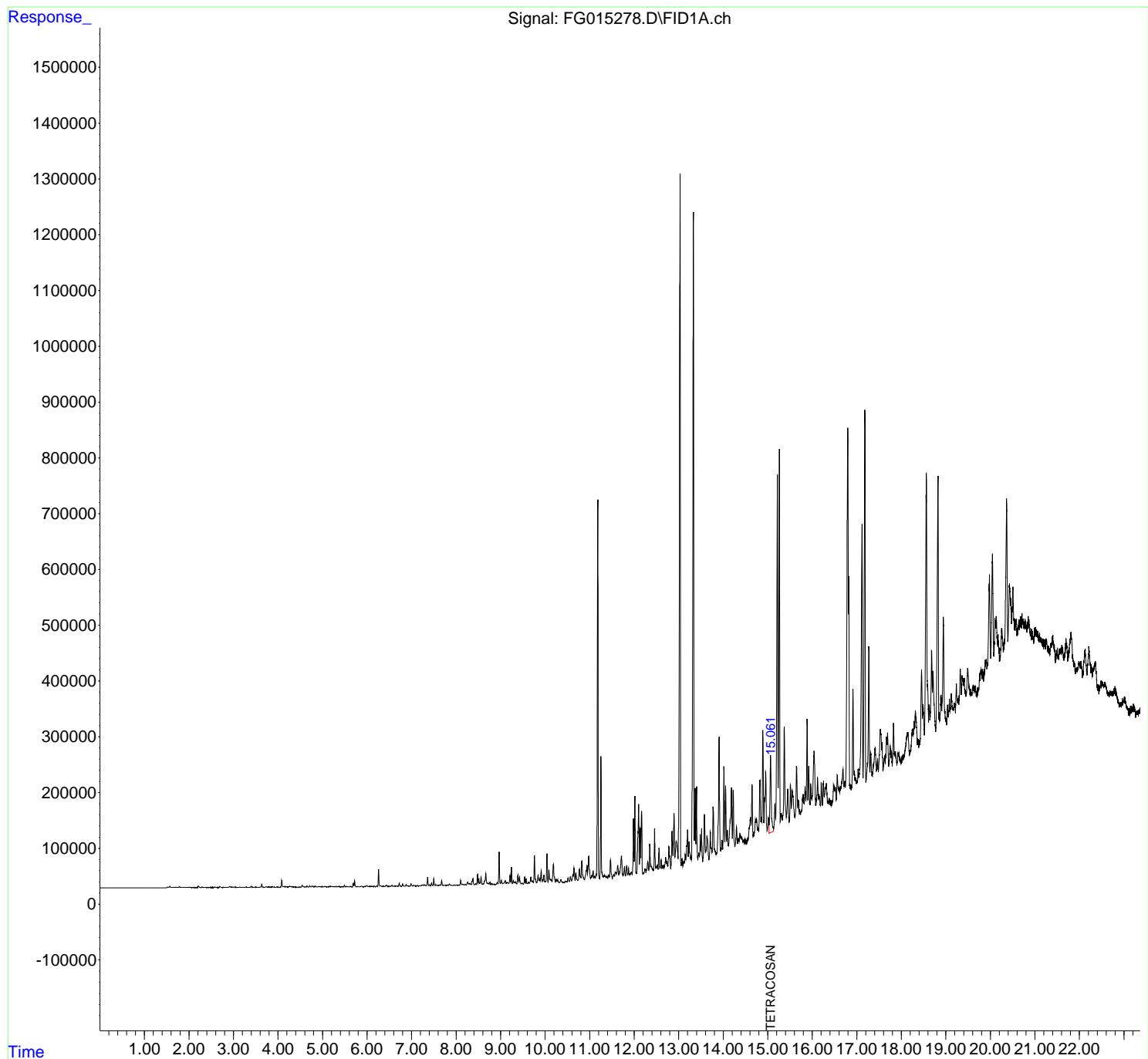
(f)=RT Delta > 1/2 Window (m)=manual int.

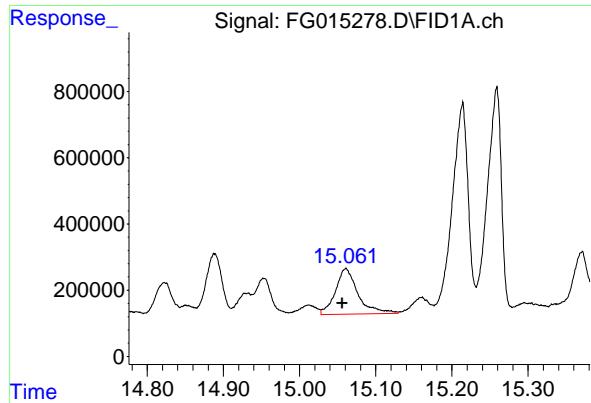
Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG013125\  
Data File : FG015278.D  
Signal(s) : FID1A.ch  
Acq On : 31 Jan 2025 13:54  
Operator : YP\AJ  
Sample : Q1232-13  
Misc :  
ALS Vial : 17 Sample Multiplier: 1

Instrument :  
FID\_G  
ClientSampleId :  
JPP-42.2-012925

Integration File: autoint1.e  
Quant Time: Feb 01 01:14:32 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 : Rx1-1ms  
Signal Info : 20mx0.18mmx0.18um





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 15.061 min  
Delta R.T.: 0.005 min  
Instrument: FID\_G  
Response: 2804381  
Conc: 21.86 ug/ml  
ClientSampleId: JPP-42.2-012925

## rteres

## Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG013125\  
 Data File : FG015278.D  
 Signal(s) : FID1A.ch  
 Acq On : 31 Jan 2025 13:54  
 Sample : Q1232-13  
 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	4.405	4.350	4.409	BH	-271	-4788	-0.02%	-0.001%
2	4.435	4.409	4.461	PH	-63	-6882	-0.04%	-0.001%
3	4.480	4.461	4.511	PH	63	-5248	-0.03%	-0.001%
4	4.543	4.511	4.574	PH	3197	43656	0.22%	0.008%
5	4.582	4.574	4.599	HH	488	3743	0.02%	0.001%
6	4.617	4.599	4.635	PH	370	2866	0.01%	0.001%
7	4.653	4.635	4.684	PH	1921	19397	0.10%	0.004%
8	4.711	4.684	4.737	PH	2358	27436	0.14%	0.005%
9	4.767	4.737	4.811	HH	1886	34669	0.18%	0.007%
10	4.829	4.811	4.844	PH	1887	17859	0.09%	0.003%
11	4.854	4.844	4.879	HH	652	7268	0.04%	0.001%
12	4.914	4.879	4.945	HH	1151	22986	0.12%	0.004%
13	4.959	4.945	4.977	HH	686	8557	0.04%	0.002%
14	5.007	4.977	5.030	HH	705	13389	0.07%	0.003%
15	5.055	5.030	5.090	HH	1024	16959	0.09%	0.003%
16	5.102	5.090	5.109	PH	185	1283	0.01%	0.000%
17	5.127	5.109	5.138	HH	481	5069	0.03%	0.001%
18	5.165	5.138	5.195	HH	1434	29188	0.15%	0.006%
19	5.204	5.195	5.214	HH	881	8416	0.04%	0.002%
20	5.224	5.214	5.242	HH	936	10171	0.05%	0.002%
21	5.258	5.242	5.280	HH	870	12346	0.06%	0.002%
22	5.301	5.280	5.318	HH	1454	18159	0.09%	0.003%
23	5.330	5.318	5.345	HH	805	9358	0.05%	0.002%
24	5.367	5.345	5.408	HH	1447	20507	0.10%	0.004%
25	5.431	5.408	5.447	PH	558	6285	0.03%	0.001%
26	5.464	5.447	5.474	HH	709	7979	0.04%	0.002%
27	5.491	5.474	5.516	HH	3200	38456	0.20%	0.007%
28	5.529	5.516	5.548	HH	918	11632	0.06%	0.002%
29	5.563	5.548	5.580	HH	869	9846	0.05%	0.002%
30	5.591	5.580	5.605	HH	385	4135	0.02%	0.001%
31	5.624	5.605	5.644	HH	1643	18753	0.10%	0.004%
32	5.655	5.644	5.667	HH	144	1022	0.01%	0.000%
33	5.688	5.667	5.706	PH	6956	79669	0.41%	0.015%
34	5.721	5.706	5.758	HH	11568	127684	0.65%	0.024%
35	5.765	5.758	5.780	HH	682	6288	0.03%	0.001%
36	5.796	5.780	5.832	HH	789	15527	0.08%	0.003%

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37	5. 850	5. 832	5. 859	HH	847	10077	0. 05%	0. 002%
38	5. 873	5. 859	5. 907	HH	1709	30412	0. 16%	0. 006%
39	5. 923	5. 907	5. 929	HH	467	5284	0. 03%	0. 001%
40	5. 955	5. 929	5. 969	HH	1466	23295	0. 12%	0. 004%
41	5. 999	5. 969	6. 041	HH	2643	66158	0. 34%	0. 013%
42	6. 057	6. 041	6. 091	HH	1688	30583	0. 16%	0. 006%
43	6. 103	6. 091	6. 114	HH	1059	12240	0. 06%	0. 002%
44	6. 125	6. 114	6. 143	HH	976	14235	0. 07%	0. 003%
45	6. 163	6. 143	6. 188	HH	1796	29686	0. 15%	0. 006%
46	6. 223	6. 188	6. 240	HH	2097	38024	0. 19%	0. 007%
47	6. 260	6. 240	6. 296	HH	31757	343156	1. 75%	0. 065%
48	6. 311	6. 296	6. 349	HH	2630	51313	0. 26%	0. 010%
49	6. 367	6. 349	6. 389	HH	1793	30059	0. 15%	0. 006%
50	6. 411	6. 389	6. 420	HH	1911	25855	0. 13%	0. 005%
51	6. 437	6. 420	6. 473	HH	3440	65098	0. 33%	0. 012%
52	6. 491	6. 473	6. 502	HH	1350	18967	0. 10%	0. 004%
53	6. 516	6. 502	6. 534	HH	1470	24417	0. 12%	0. 005%
54	6. 561	6. 534	6. 585	HH	3137	56582	0. 29%	0. 011%
55	6. 612	6. 585	6. 626	HH	1793	36789	0. 19%	0. 007%
56	6. 643	6. 626	6. 659	HH	1827	31533	0. 16%	0. 006%
57	6. 670	6. 659	6. 687	HH	2041	28446	0. 15%	0. 005%
58	6. 692	6. 687	6. 702	HH	1350	10980	0. 06%	0. 002%
59	6. 724	6. 702	6. 747	HH	7130	96857	0. 49%	0. 018%
60	6. 756	6. 747	6. 778	HH	1751	27126	0. 14%	0. 005%
61	6. 801	6. 778	6. 841	HH	5382	93876	0. 48%	0. 018%
62	6. 851	6. 841	6. 862	HH	1739	19968	0. 10%	0. 004%
63	6. 879	6. 862	6. 903	HH	4625	69224	0. 35%	0. 013%
64	6. 918	6. 903	6. 940	HH	2275	40163	0. 21%	0. 008%
65	6. 953	6. 940	6. 966	HH	1622	21664	0. 11%	0. 004%
66	6. 988	6. 966	7. 029	HH	5931	114984	0. 59%	0. 022%
67	7. 051	7. 029	7. 084	HH	3320	75344	0. 38%	0. 014%
68	7. 094	7. 084	7. 108	HH	1894	25717	0. 13%	0. 005%
69	7. 132	7. 108	7. 154	HH	3037	63079	0. 32%	0. 012%
70	7. 166	7. 154	7. 173	HH	2007	20446	0. 10%	0. 004%
71	7. 260	7. 173	7. 282	HH	4257	183968	0. 94%	0. 035%
72	7. 300	7. 282	7. 331	HH	4304	88458	0. 45%	0. 017%
73	7. 362	7. 331	7. 385	HH	17883	241135	1. 23%	0. 046%
74	7. 405	7. 385	7. 430	HH	3748	84052	0. 43%	0. 016%
75	7. 449	7. 430	7. 479	HH	7344	124675	0. 64%	0. 024%
76	7. 500	7. 479	7. 530	HH	14738	198586	1. 01%	0. 038%
77	7. 547	7. 530	7. 565	HH	4270	69991	0. 36%	0. 013%
78	7. 578	7. 565	7. 607	HH	2891	67672	0. 35%	0. 013%
79	7. 623	7. 607	7. 640	HH	3653	62807	0. 32%	0. 012%
80	7. 652	7. 640	7. 656	HH	3614	34197	0. 17%	0. 007%
81	7. 677	7. 656	7. 706	HH	11750	180233	0. 92%	0. 034%
82	7. 736	7. 706	7. 754	HH	3377	88668	0. 45%	0. 017%
83	7. 765	7. 754	7. 776	HH	3130	39459	0. 20%	0. 008%
84	7. 801	7. 776	7. 826	HH	3723	97105	0. 50%	0. 019%
85	7. 853	7. 826	7. 881	HH	5687	134082	0. 68%	0. 026%
86	7. 902	7. 881	7. 922	HH	3383	73692	0. 38%	0. 014%
87	7. 944	7. 922	7. 952	HH	3290	52126	0. 27%	0. 010%
88	7. 965	7. 952	7. 982	HH	3927	62027	0. 32%	0. 012%
89	7. 996	7. 982	8. 003	HH	3267	39688	0. 20%	0. 008%

						rteres			
90	8. 016	8. 003	8. 035	HH	3920	66760	0. 34%	0. 013%	
91	8. 052	8. 035	8. 079	HH	3430	82746	0. 42%	0. 016%	
92	8. 105	8. 079	8. 127	HH	12161	195877	1. 00%	0. 037%	
93	8. 138	8. 127	8. 153	HH	5265	75633	0. 39%	0. 014%	
94	8. 165	8. 153	8. 189	HH	4882	91123	0. 47%	0. 017%	
95	8. 208	8. 189	8. 228	HH	5128	99322	0. 51%	0. 019%	
96	8. 261	8. 228	8. 280	HH	9152	194909	1. 00%	0. 037%	
97	8. 289	8. 280	8. 300	HH	5854	67165	0. 34%	0. 013%	
98	8. 314	8. 300	8. 341	HH	6714	135921	0. 69%	0. 026%	
99	8. 379	8. 341	8. 414	HH	15163	359906	1. 84%	0. 069%	
100	8. 452	8. 414	8. 459	HH	5389	131603	0. 67%	0. 025%	
101	8. 483	8. 459	8. 499	HH	22705	304116	1. 55%	0. 058%	
102	8. 511	8. 499	8. 528	HH	14470	176048	0. 90%	0. 034%	
103	8. 563	8. 528	8. 590	HH	18099	347545	1. 78%	0. 066%	
104	8. 609	8. 590	8. 619	HH	5764	94167	0. 48%	0. 018%	
105	8. 669	8. 619	8. 705	HH	24027	589815	3. 01%	0. 113%	
106	8. 720	8. 705	8. 741	HH	7373	135239	0. 69%	0. 026%	
107	8. 760	8. 741	8. 781	HH	8939	159224	0. 81%	0. 030%	
108	8. 785	8. 781	8. 795	HH	5371	42924	0. 22%	0. 008%	
109	8. 810	8. 795	8. 829	HH	6117	105447	0. 54%	0. 020%	
110	8. 851	8. 829	8. 880	HH	5039	144508	0. 74%	0. 028%	
111	8. 895	8. 880	8. 904	HH	4714	62590	0. 32%	0. 012%	
112	8. 922	8. 904	8. 944	HH	8081	154601	0. 79%	0. 030%	
113	8. 968	8. 944	8. 999	HH	63241	778446	3. 98%	0. 149%	
114	9. 017	8. 999	9. 049	HH	12107	251102	1. 28%	0. 048%	
115	9. 060	9. 049	9. 066	HH	6604	66452	0. 34%	0. 013%	
116	9. 089	9. 066	9. 094	HH	9126	128224	0. 66%	0. 024%	
117	9. 106	9. 094	9. 126	HH	11854	181769	0. 93%	0. 035%	
118	9. 142	9. 126	9. 151	HH	8507	113330	0. 58%	0. 022%	
119	9. 159	9. 151	9. 180	HH	7957	125575	0. 64%	0. 024%	
120	9. 213	9. 180	9. 228	HH	21145	346160	1. 77%	0. 066%	
121	9. 245	9. 228	9. 271	HH	35545	457291	2. 34%	0. 087%	
122	9. 289	9. 271	9. 306	HH	12141	193809	0. 99%	0. 037%	
123	9. 311	9. 306	9. 323	HH	8050	80357	0. 41%	0. 015%	
124	9. 338	9. 323	9. 355	HH	9512	151349	0. 77%	0. 029%	
125	9. 360	9. 355	9. 366	HH	6448	41118	0. 21%	0. 008%	
126	9. 389	9. 366	9. 410	HH	21450	357086	1. 82%	0. 068%	
127	9. 426	9. 410	9. 468	HH	18267	345496	1. 76%	0. 066%	
128	9. 484	9. 468	9. 509	HH	7143	151684	0. 77%	0. 029%	
129	9. 542	9. 509	9. 559	HH	18270	308819	1. 58%	0. 059%	
130	9. 574	9. 559	9. 608	HH	15044	267897	1. 37%	0. 051%	
131	9. 627	9. 608	9. 645	HH	9276	163296	0. 83%	0. 031%	
132	9. 679	9. 645	9. 694	HH	17684	338006	1. 73%	0. 064%	
133	9. 700	9. 694	9. 712	HH	10947	107777	0. 55%	0. 021%	
134	9. 721	9. 712	9. 739	HH	10591	151207	0. 77%	0. 029%	
135	9. 762	9. 739	9. 815	HH	56422	932772	4. 76%	0. 178%	
136	9. 842	9. 815	9. 872	HH	20904	456809	2. 33%	0. 087%	
137	9. 884	9. 872	9. 895	HH	15818	184106	0. 94%	0. 035%	
138	9. 913	9. 895	9. 933	HH	29206	441344	2. 25%	0. 084%	
139	9. 944	9. 933	9. 956	HH	13121	166861	0. 85%	0. 032%	
140	9. 974	9. 956	9. 996	HH	21661	358020	1. 83%	0. 068%	
141	10. 007	9. 996	10. 015	HH	9704	105504	0. 54%	0. 020%	

rteres									
142	10. 043	10. 015	10. 066	HH	59850	814202	4. 16%	0. 155%	
143	10. 088	10. 066	10. 110	HH	30527	490213	2. 50%	0. 094%	
144	10. 114	10. 110	10. 130	HH	13802	162193	0. 83%	0. 031%	
145	10. 139	10. 130	10. 156	HH	13060	179376	0. 92%	0. 034%	
146	10. 186	10. 156	10. 232	HH	40747	952301	4. 86%	0. 182%	
147	10. 250	10. 232	10. 270	HH	14193	265566	1. 36%	0. 051%	
148	10. 284	10. 270	10. 316	HH	12725	277352	1. 42%	0. 053%	
149	10. 355	10. 316	10. 386	HH	13716	426622	2. 18%	0. 081%	
150	10. 390	10. 386	10. 406	HH	8861	102022	0. 52%	0. 019%	
151	10. 413	10. 406	10. 436	HH	8245	142967	0. 73%	0. 027%	
152	10. 454	10. 436	10. 470	HH	10617	194530	0. 99%	0. 037%	
153	10. 483	10. 470	10. 497	HH	9784	151705	0. 77%	0. 029%	
154	10. 514	10. 497	10. 545	HH	16100	346220	1. 77%	0. 066%	
155	10. 569	10. 545	10. 597	HH	18558	436991	2. 23%	0. 083%	
156	10. 624	10. 597	10. 635	HH	22644	392471	2. 00%	0. 075%	
157	10. 651	10. 635	10. 675	HH	34307	567190	2. 90%	0. 108%	
158	10. 692	10. 675	10. 730	HH	25809	553193	2. 83%	0. 106%	
159	10. 769	10. 730	10. 804	HH	32148	848258	4. 33%	0. 162%	
160	10. 823	10. 804	10. 882	HH	46296	1115849	5. 70%	0. 213%	
161	10. 923	10. 882	10. 928	HH	29472	561029	2. 87%	0. 107%	
162	10. 942	10. 928	10. 955	HH	38301	521440	2. 66%	0. 100%	
163	10. 978	10. 955	11. 020	HH	55222	1306493	6. 67%	0. 249%	
164	11. 049	11. 020	11. 060	HH	20836	446455	2. 28%	0. 085%	
165	11. 078	11. 060	11. 095	HH	28706	469550	2. 40%	0. 090%	
166	11. 108	11. 095	11. 129	HH	18980	351346	1. 79%	0. 067%	
167	11. 145	11. 129	11. 152	HH	23033	286795	1. 47%	0. 055%	
168	11. 184	11. 152	11. 222	HH	693400	8096999	41. 36%	1. 545%	
169	11. 254	11. 222	11. 275	HH	234025	2719681	13. 89%	0. 519%	
170	11. 278	11. 275	11. 296	HH	25723	282644	1. 44%	0. 054%	
171	11. 308	11. 296	11. 320	HH	20103	283318	1. 45%	0. 054%	
172	11. 337	11. 320	11. 373	HH	20919	597781	3. 05%	0. 114%	
173	11. 388	11. 373	11. 407	HH	18583	354177	1. 81%	0. 068%	
174	11. 426	11. 407	11. 445	HH	21882	436584	2. 23%	0. 083%	
175	11. 468	11. 445	11. 509	HH	48320	1043755	5. 33%	0. 199%	
176	11. 540	11. 509	11. 555	HH	22239	544543	2. 78%	0. 104%	
177	11. 580	11. 555	11. 596	HH	26614	586909	3. 00%	0. 112%	
178	11. 631	11. 596	11. 657	HH	38507	1033083	5. 28%	0. 197%	
179	11. 674	11. 657	11. 680	HH	28972	360329	1. 84%	0. 069%	
180	11. 715	11. 680	11. 749	HH	55142	1496942	7. 65%	0. 286%	
181	11. 781	11. 749	11. 805	HH	37373	890329	4. 55%	0. 170%	
182	11. 832	11. 805	11. 854	HH	38473	840252	4. 29%	0. 160%	
183	11. 875	11. 854	11. 898	HH	33995	705395	3. 60%	0. 135%	
184	11. 915	11. 898	11. 920	HH	24041	303950	1. 55%	0. 058%	
185	11. 936	11. 920	11. 955	HH	26753	515471	2. 63%	0. 098%	
186	11. 986	11. 955	12. 001	HH	122765	1784204	9. 11%	0. 340%	
187	12. 017	12. 001	12. 042	HH	162719	2098316	10. 72%	0. 400%	
188	12. 047	12. 042	12. 060	HH	26138	268109	1. 37%	0. 051%	
189	12. 102	12. 060	12. 119	HH	148537	2911433	14. 87%	0. 556%	
190	12. 135	12. 119	12. 150	HH	105593	1390898	7. 11%	0. 265%	
191	12. 166	12. 150	12. 197	HH	136216	1986088	10. 15%	0. 379%	
192	12. 210	12. 197	12. 217	HH	25170	293389	1. 50%	0. 056%	
193	12. 239	12. 217	12. 265	HH	32601	845880	4. 32%	0. 161%	
194	12. 305	12. 265	12. 328	HH	44807	1302740	6. 65%	0. 249%	

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195	12. 349	12. 328	12. 367	HH	77294	1237559	6. 32%	0. 236%	
196	12. 374	12. 367	12. 409	HH	39526	898110	4. 59%	0. 171%	
197	12. 412	12. 409	12. 416	HH	31444	134827	0. 69%	0. 026%	
198	12. 420	12. 416	12. 435	HH	32171	345163	1. 76%	0. 066%	
199	12. 457	12. 435	12. 480	HH	103888	1649857	8. 43%	0. 315%	
200	12. 490	12. 480	12. 502	HH	36505	478953	2. 45%	0. 091%	
201	12. 519	12. 502	12. 536	HH	39215	738649	3. 77%	0. 141%	
202	12. 557	12. 536	12. 580	HH	69761	1244372	6. 36%	0. 237%	
203	12. 605	12. 580	12. 621	HH	48483	1001574	5. 12%	0. 191%	
204	12. 636	12. 621	12. 653	HH	38371	676733	3. 46%	0. 129%	
205	12. 665	12. 653	12. 680	HH	38474	588387	3. 01%	0. 112%	
206	12. 707	12. 680	12. 723	HH	53555	1175035	6. 00%	0. 224%	
207	12. 734	12. 723	12. 752	HH	47005	752853	3. 85%	0. 144%	
208	12. 779	12. 752	12. 822	HH	72529	2113319	10. 80%	0. 403%	
209	12. 849	12. 822	12. 870	HH	99857	1944018	9. 93%	0. 371%	
210	12. 893	12. 870	12. 915	HH	132083	2434663	12. 44%	0. 465%	
211	12. 944	12. 915	12. 985	HH	81258	2924580	14. 94%	0. 558%	
212	13. 029	12. 985	13. 056	HH	1276205	18539799	94. 71%	3. 538%	
213	13. 075	13. 056	13. 094	HH	50982	984450	5. 03%	0. 188%	
214	13. 110	13. 094	13. 123	HH	45756	753120	3. 85%	0. 144%	
215	13. 144	13. 123	13. 158	HH	58755	1089609	5. 57%	0. 208%	
216	13. 197	13. 158	13. 215	HH	101601	2493966	12. 74%	0. 476%	
217	13. 230	13. 215	13. 271	HH	81423	2135651	10. 91%	0. 408%	
218	13. 275	13. 271	13. 286	HH	53812	462353	2. 36%	0. 088%	
219	13. 330	13. 286	13. 352	HH	1208065	17637845	90. 10%	3. 366%	
220	13. 369	13. 352	13. 384	HH	175955	2403326	12. 28%	0. 459%	
221	13. 400	13. 384	13. 429	HH	180210	2799413	14. 30%	0. 534%	
222	13. 449	13. 429	13. 465	HH	60717	1195850	6. 11%	0. 228%	
223	13. 484	13. 465	13. 497	HH	92558	1458931	7. 45%	0. 278%	
224	13. 513	13. 497	13. 538	HH	104345	1835593	9. 38%	0. 350%	
225	13. 578	13. 538	13. 600	HH	129788	2959264	15. 12%	0. 565%	
226	13. 636	13. 600	13. 677	HH	92090	3270435	16. 71%	0. 624%	
227	13. 709	13. 677	13. 733	HH	99029	2392101	12. 22%	0. 456%	
228	13. 737	13. 733	13. 748	HH	69923	602185	3. 08%	0. 115%	
229	13. 773	13. 748	13. 836	HH	143787	4500355	22. 99%	0. 859%	
230	13. 851	13. 836	13. 858	HH	60961	776466	3. 97%	0. 148%	
231	13. 906	13. 858	13. 940	HH	268433	6358231	32. 48%	1. 213%	
232	13. 972	13. 940	13. 987	HH	83954	2027905	10. 36%	0. 387%	
233	14. 014	13. 987	14. 034	HH	216031	3692756	18. 86%	0. 705%	
234	14. 052	14. 034	14. 074	HH	180379	2947189	15. 06%	0. 562%	
235	14. 090	14. 074	14. 119	HH	101408	2340984	11. 96%	0. 447%	
236	14. 183	14. 119	14. 204	HH	177814	6012883	30. 72%	1. 147%	
237	14. 223	14. 204	14. 262	HH	174101	3829555	19. 56%	0. 731%	
238	14. 298	14. 262	14. 322	HH	107894	3142601	16. 05%	0. 600%	
239	14. 342	14. 322	14. 356	HH	86544	1706541	8. 72%	0. 326%	
240	14. 385	14. 356	14. 407	HH	93494	2719320	13. 89%	0. 519%	
241	14. 417	14. 407	14. 430	HH	89657	1179914	6. 03%	0. 225%	
242	14. 433	14. 430	14. 448	HH	85276	938398	4. 79%	0. 179%	
243	14. 458	14. 448	14. 474	HH	84502	1246033	6. 37%	0. 238%	
244	14. 492	14. 474	14. 509	HH	85666	1757986	8. 98%	0. 335%	
245	14. 548	14. 509	14. 558	HH	87402	2426296	12. 39%	0. 463%	
246	14. 613	14. 558	14. 625	HH	124371	4342608	22. 18%	0. 829%	

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247	14. 646	14. 625	14. 677	HH	182952	4001458	20. 44%	0. 764%	
248	14. 723	14. 677	14. 732	HH	121357	3476922	17. 76%	0. 663%	
249	14. 747	14. 732	14. 772	HH	122689	2711660	13. 85%	0. 517%	
250	14. 779	14. 772	14. 795	HH	104848	1449188	7. 40%	0. 277%	
251	14. 823	14. 795	14. 843	HH	192211	4214097	21. 53%	0. 804%	
252	14. 851	14. 843	14. 865	HH	124787	1579364	8. 07%	0. 301%	
253	14. 888	14. 865	14. 911	HH	278081	5272484	26. 93%	1. 006%	
254	14. 932	14. 911	14. 938	HH	160461	2317735	11. 84%	0. 442%	
255	14. 953	14. 938	14. 986	HH	204248	4311425	22. 02%	0. 823%	
256	15. 012	14. 986	15. 028	HH	124506	2886725	14. 75%	0. 551%	
257	15. 061	15. 028	15. 130	HH	236563	8786116	44. 88%	1. 677%	
258	15. 160	15. 130	15. 177	HH	147338	3595931	18. 37%	0. 686%	
259	15. 214	15. 177	15. 232	HH	730331	12517625	63. 94%	2. 389%	
260	15. 259	15. 232	15. 280	HH	780136	11670653	59. 62%	2. 227%	
261	15. 295	15. 280	15. 300	HH	131982	1470505	7. 51%	0. 281%	
262	15. 303	15. 300	15. 327	HH	129699	2047351	10. 46%	0. 391%	
263	15. 371	15. 327	15. 418	HH	284108	9125580	46. 62%	1. 741%	
264	15. 447	15. 418	15. 480	HH	175129	5333442	27. 24%	1. 018%	
265	15. 509	15. 480	15. 528	HH	182805	4317209	22. 05%	0. 824%	
266	15. 549	15. 528	15. 610	HH	173166	7343556	37. 51%	1. 401%	
267	15. 644	15. 610	15. 677	HH	216979	6624077	33. 84%	1. 264%	
268	15. 690	15. 677	15. 735	HH	154951	4904733	25. 05%	0. 936%	
269	15. 753	15. 735	15. 757	HH	137907	1782851	9. 11%	0. 340%	
270	15. 793	15. 757	15. 813	HH	164706	5096250	26. 03%	0. 972%	
271	15. 836	15. 813	15. 855	HH	180417	4164665	21. 27%	0. 795%	
272	15. 883	15. 855	15. 901	HH	298868	5865453	29. 96%	1. 119%	
273	15. 919	15. 901	15. 947	HH	215863	4882942	24. 94%	0. 932%	
274	15. 965	15. 947	15. 989	HH	185289	4185720	21. 38%	0. 799%	
275	16. 040	15. 989	16. 079	HH	243286	10303380	52. 63%	1. 966%	
276	16. 117	16. 079	16. 137	HH	194706	5973223	30. 51%	1. 140%	
277	16. 151	16. 137	16. 177	HH	166277	3756951	19. 19%	0. 717%	
278	16. 202	16. 177	16. 225	HH	186523	4680796	23. 91%	0. 893%	
279	16. 250	16. 225	16. 272	HH	189130	4720341	24. 11%	0. 901%	
280	16. 314	16. 272	16. 352	HH	185782	8129654	41. 53%	1. 551%	
281	16. 356	16. 352	16. 362	HH	153570	906013	4. 63%	0. 173%	
282	16. 378	16. 362	16. 407	HH	158936	4109830	20. 99%	0. 784%	
283	16. 419	16. 407	16. 432	HH	154149	2233932	11. 41%	0. 426%	
284	16. 478	16. 432	16. 497	HH	181623	6414111	32. 77%	1. 224%	
285	16. 518	16. 497	16. 540	HH	179007	4437544	22. 67%	0. 847%	
286	16. 561	16. 540	16. 584	HH	199879	4753903	24. 28%	0. 907%	
287	16. 592	16. 584	16. 613	HH	178757	3055561	15. 61%	0. 583%	
288	16. 616	16. 613	16. 622	HH	174471	949900	4. 85%	0. 181%	
289	16. 634	16. 622	16. 641	HH	179679	2037354	10. 41%	0. 389%	
290	16. 691	16. 641	16. 714	HH	210372	8367659	42. 74%	1. 597%	
291	16. 728	16. 714	16. 744	HH	188884	3330475	17. 01%	0. 636%	
292	16. 797	16. 744	16. 810	HH	823592	19576078	100. 00%	3. 736%	
293	16. 818	16. 810	16. 849	HH	556614	7706853	39. 37%	1. 471%	
294	16. 854	16. 849	16. 874	HH	183256	2698883	13. 79%	0. 515%	
295	16. 880	16. 874	16. 886	HH	179618	1331264	6. 80%	0. 254%	
296	16. 912	16. 886	16. 932	HH	354571	7138197	36. 46%	1. 362%	
297	16. 945	16. 932	16. 958	HH	208077	3129057	15. 98%	0. 597%	
298	16. 962	16. 958	16. 991	HH	196462	3826327	19. 55%	0. 730%	
299	17. 007	16. 991	17. 012	HH	190060	2355315	12. 03%	0. 449%	

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300	17. 029	17. 012	17. 051	HH	210816	4729598	24.	16%	0.	903%
301	17. 116	17. 051	17. 139	HH	650804	18089422	92.	41%	3.	452%
302	17. 181	17. 139	17. 202	HH	851048	17247409	88.	10%	3.	291%
303	17. 269	17. 202	17. 293	HH	430361	14039925	71.	72%	2.	679%
304	17. 313	17. 293	17. 345	HH	241302	6893543	35.	21%	1.	315%
305	17. 370	17. 345	17. 375	HH	220053	3769163	19.	25%	0.	719%

Sum of corrected areas: 524048221

FG011325. M Sat Feb 01 02:14:53 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG013125\  
Data File : FG015279.D  
Signal(s) : FID1A.ch  
Acq On : 31 Jan 2025 14:23  
Operator : YP\AJ  
Sample : Q1232-17  
Misc :  
ALS Vial : 18 Sample Multiplier: 1

Instrument :  
FID\_G  
ClientSampleId :  
JPP-51.1-012925

Integration File: autoint1.e  
Quant Time: Feb 01 01:14:57 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 : Rx1-1ms  
Signal Info : 20mx0.18mmx0.18um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

9) S TETRACOSANE-d50 (SURR...	15.061	2519816	19.644 ug/ml
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Target Compounds

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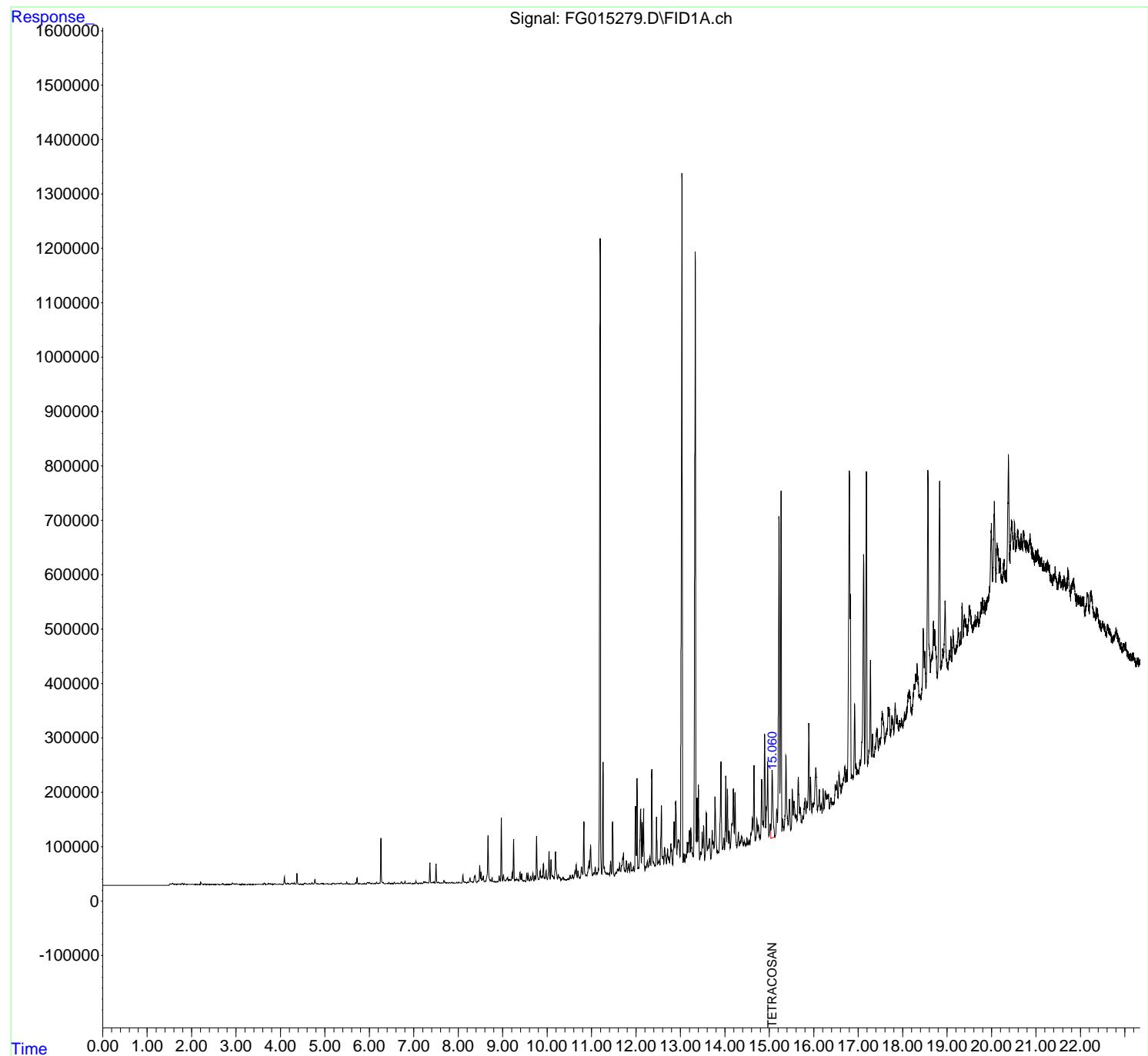
(f)=RT Delta > 1/2 Window (m)=manual int.

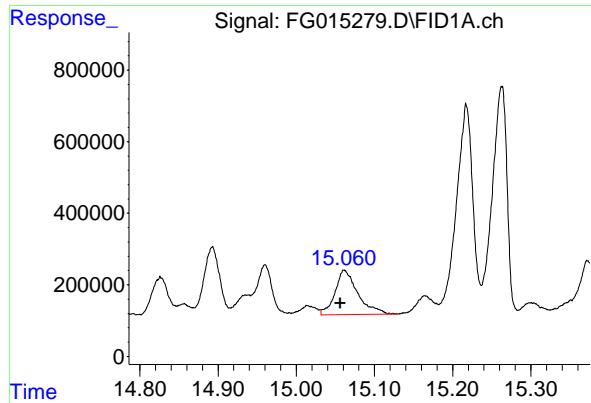
Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG013125\  
Data File : FG015279.D  
Signal(s) : FID1A.ch  
Acq On : 31 Jan 2025 14:23  
Operator : YP\AJ  
Sample : Q1232-17  
Misc :  
ALS Vial : 18 Sample Multiplier: 1

Instrument :  
FID\_G  
ClientSampleId :  
JPP-51.1-012925

Integration File: autoint1.e  
Quant Time: Feb 01 01:14:57 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 : Rx1-1ms  
Signal Info : 20mx0.18mmx0.18um





#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 15.061 min  
Delta R.T.: 0.005 min  
Instrument:  
Response: 2519816 FID\_G  
Conc: 19.64 ug/ml ClientSampleId :  
JPP-51.1-012925

## rteres

## Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG013125\  
 Data File : FG015279.D  
 Signal (s) : FID1A.ch  
 Acq On : 31 Jan 2025 14:23  
 Sample : Q1232-17  
 Misc :  
 ALS Vial : 18 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	4.371	4.350	4.424	BH	19622	197296	1.00%	0.037%
2	4.428	4.424	4.449	PH	-333	-5865	-0.03%	-0.001%
3	4.452	4.449	4.458	PH	-359	-2218	-0.01%	-0.000%
4	4.480	4.458	4.511	PH	-169	-10938	-0.06%	-0.002%
5	4.551	4.511	4.572	PH	1977	21561	0.11%	0.004%
6	4.583	4.572	4.603	HH	783	5788	0.03%	0.001%
7	4.620	4.603	4.636	PH	368	968	0.00%	0.000%
8	4.654	4.636	4.681	PH	1387	12004	0.06%	0.002%
9	4.710	4.681	4.735	PH	2468	29354	0.15%	0.006%
10	4.774	4.735	4.818	PH	8317	108946	0.55%	0.021%
11	4.829	4.818	4.845	HH	585	5648	0.03%	0.001%
12	4.856	4.845	4.889	HH	421	2406	0.01%	0.000%
13	4.913	4.889	4.924	PH	1228	12977	0.07%	0.002%
14	4.932	4.924	4.982	HH	1268	19109	0.10%	0.004%
15	5.009	4.982	5.026	PH	467	6295	0.03%	0.001%
16	5.049	5.026	5.090	HH	910	14650	0.07%	0.003%
17	5.096	5.090	5.117	PH	67	-1331	-0.01%	-0.000%
18	5.129	5.117	5.151	PH	5	-3880	-0.02%	-0.001%
19	5.182	5.151	5.198	PH	1883	27637	0.14%	0.005%
20	5.203	5.198	5.237	HH	782	6939	0.04%	0.001%
21	5.270	5.237	5.285	PH	1197	14985	0.08%	0.003%
22	5.305	5.285	5.322	HH	1367	20156	0.10%	0.004%
23	5.336	5.322	5.346	HH	1155	12818	0.07%	0.002%
24	5.367	5.346	5.413	HH	2193	33525	0.17%	0.006%
25	5.435	5.413	5.452	PH	897	9439	0.05%	0.002%
26	5.455	5.452	5.473	HH	462	2621	0.01%	0.000%
27	5.492	5.473	5.519	PH	3836	41178	0.21%	0.008%
28	5.526	5.519	5.545	HH	347	2958	0.02%	0.001%
29	5.565	5.545	5.585	HH	604	3950	0.02%	0.001%
30	5.597	5.585	5.607	PH	-69	-2310	-0.01%	-0.000%
31	5.626	5.607	5.651	PH	536	2768	0.01%	0.001%
32	5.659	5.651	5.665	PH	-54	-1002	-0.01%	-0.000%
33	5.690	5.665	5.705	PH	2527	27318	0.14%	0.005%
34	5.722	5.705	5.756	HH	11309	121111	0.62%	0.023%
35	5.771	5.756	5.785	HH	1369	12408	0.06%	0.002%
36	5.800	5.785	5.834	HH	969	11993	0.06%	0.002%

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37	5. 849	5. 834	5. 861	PH	506	3666	0. 02%	0. 001%
38	5. 883	5. 861	5. 910	HH	996	13753	0. 07%	0. 003%
39	5. 921	5. 910	5. 927	PH	233	1653	0. 01%	0. 000%
40	5. 960	5. 927	5. 974	HH	3290	52749	0. 27%	0. 010%
41	5. 980	5. 974	5. 991	HH	2154	19272	0. 10%	0. 004%
42	6. 004	5. 991	6. 035	HH	3201	49864	0. 25%	0. 009%
43	6. 057	6. 035	6. 090	HH	1557	30424	0. 15%	0. 006%
44	6. 106	6. 090	6. 120	HH	1256	16165	0. 08%	0. 003%
45	6. 132	6. 120	6. 146	HH	1105	14638	0. 07%	0. 003%
46	6. 163	6. 146	6. 187	HH	3757	45463	0. 23%	0. 009%
47	6. 198	6. 187	6. 209	HH	1146	12570	0. 06%	0. 002%
48	6. 224	6. 209	6. 239	HH	1832	25713	0. 13%	0. 005%
49	6. 261	6. 239	6. 299	HH	83953	842963	4. 29%	0. 160%
50	6. 310	6. 299	6. 348	HH	3025	44436	0. 23%	0. 008%
51	6. 373	6. 348	6. 378	HH	888	11826	0. 06%	0. 002%
52	6. 389	6. 378	6. 398	HH	833	8668	0. 04%	0. 002%
53	6. 414	6. 398	6. 422	HH	1347	15188	0. 08%	0. 003%
54	6. 437	6. 422	6. 477	HH	2936	46557	0. 24%	0. 009%
55	6. 492	6. 477	6. 503	HH	1139	14751	0. 08%	0. 003%
56	6. 511	6. 503	6. 541	HH	1110	18110	0. 09%	0. 003%
57	6. 563	6. 541	6. 592	HH	3454	50057	0. 25%	0. 009%
58	6. 613	6. 592	6. 627	HH	1707	24725	0. 13%	0. 005%
59	6. 635	6. 627	6. 658	HH	1434	21332	0. 11%	0. 004%
60	6. 670	6. 658	6. 684	HH	1196	14142	0. 07%	0. 003%
61	6. 688	6. 684	6. 697	HH	809	5638	0. 03%	0. 001%
62	6. 723	6. 697	6. 780	HH	4464	91460	0. 47%	0. 017%
63	6. 803	6. 780	6. 825	HH	5177	64171	0. 33%	0. 012%
64	6. 840	6. 825	6. 865	HH	1236	24068	0. 12%	0. 005%
65	6. 880	6. 865	6. 905	HH	1983	30706	0. 16%	0. 006%
66	6. 921	6. 905	6. 972	HH	2003	42124	0. 21%	0. 008%
67	7. 009	6. 972	7. 026	HH	1501	27823	0. 14%	0. 005%
68	7. 050	7. 026	7. 107	HH	5122	94170	0. 48%	0. 018%
69	7. 132	7. 107	7. 152	HH	2118	41226	0. 21%	0. 008%
70	7. 167	7. 152	7. 198	HH	1613	33188	0. 17%	0. 006%
71	7. 224	7. 198	7. 248	HH	4616	89396	0. 45%	0. 017%
72	7. 262	7. 248	7. 286	HH	3749	74134	0. 38%	0. 014%
73	7. 302	7. 286	7. 328	HH	2849	59712	0. 30%	0. 011%
74	7. 363	7. 328	7. 386	HH	38939	430707	2. 19%	0. 082%
75	7. 400	7. 386	7. 410	HH	2762	35662	0. 18%	0. 007%
76	7. 422	7. 410	7. 438	HH	3423	47480	0. 24%	0. 009%
77	7. 451	7. 438	7. 478	HH	4352	67319	0. 34%	0. 013%
78	7. 501	7. 478	7. 532	HH	37055	403624	2. 05%	0. 076%
79	7. 546	7. 532	7. 563	HH	3431	49075	0. 25%	0. 009%
80	7. 576	7. 563	7. 601	HH	2483	48575	0. 25%	0. 009%
81	7. 605	7. 601	7. 612	HH	1749	10627	0. 05%	0. 002%
82	7. 626	7. 612	7. 644	HH	2453	39958	0. 20%	0. 008%
83	7. 678	7. 644	7. 693	HH	6582	98885	0. 50%	0. 019%
84	7. 699	7. 693	7. 721	HH	3214	42847	0. 22%	0. 008%
85	7. 743	7. 721	7. 777	HH	2475	71446	0. 36%	0. 014%
86	7. 806	7. 777	7. 826	HH	3180	71225	0. 36%	0. 013%
87	7. 857	7. 826	7. 878	HH	3299	73329	0. 37%	0. 014%
88	7. 889	7. 878	7. 900	HH	2096	26867	0. 14%	0. 005%
89	7. 907	7. 900	7. 923	HH	2046	24844	0. 13%	0. 005%

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90	7. 932	7. 923	7. 946	HH	1767	24254	0. 12%	0. 005%	
91	7. 967	7. 946	7. 990	HH	3430	59899	0. 30%	0. 011%	
92	8. 013	7. 990	8. 043	HH	3313	74146	0. 38%	0. 014%	
93	8. 066	8. 043	8. 078	HH	2175	42629	0. 22%	0. 008%	
94	8. 106	8. 078	8. 135	HH	16712	243522	1. 24%	0. 046%	
95	8. 138	8. 135	8. 155	HH	3854	41321	0. 21%	0. 008%	
96	8. 164	8. 155	8. 194	HH	3435	69128	0. 35%	0. 013%	
97	8. 210	8. 194	8. 230	HH	3743	66604	0. 34%	0. 013%	
98	8. 265	8. 230	8. 301	HH	10993	241042	1. 23%	0. 046%	
99	8. 311	8. 301	8. 327	HH	4166	58941	0. 30%	0. 011%	
100	8. 337	8. 327	8. 342	HH	3824	34606	0. 18%	0. 007%	
101	8. 365	8. 342	8. 371	HH	14296	159182	0. 81%	0. 030%	
102	8. 381	8. 371	8. 420	HH	15886	238710	1. 21%	0. 045%	
103	8. 453	8. 420	8. 463	HH	6012	124746	0. 63%	0. 024%	
104	8. 485	8. 463	8. 500	HH	34436	412023	2. 10%	0. 078%	
105	8. 513	8. 500	8. 529	HH	22250	248033	1. 26%	0. 047%	
106	8. 542	8. 529	8. 551	HH	9622	111391	0. 57%	0. 021%	
107	8. 564	8. 551	8. 591	HH	14722	217503	1. 11%	0. 041%	
108	8. 610	8. 591	8. 621	HH	5726	91919	0. 47%	0. 017%	
109	8. 672	8. 621	8. 713	HH	89006	1424379	7. 25%	0. 270%	
110	8. 724	8. 713	8. 742	HH	8065	124797	0. 64%	0. 024%	
111	8. 763	8. 742	8. 786	HH	11904	186193	0. 95%	0. 035%	
112	8. 811	8. 786	8. 830	HH	5429	115318	0. 59%	0. 022%	
113	8. 850	8. 830	8. 871	HH	4758	105482	0. 54%	0. 020%	
114	8. 875	8. 871	8. 886	HH	4287	37150	0. 19%	0. 007%	
115	8. 889	8. 886	8. 900	HH	4066	34204	0. 17%	0. 006%	
116	8. 922	8. 900	8. 946	HH	15047	238591	1. 21%	0. 045%	
117	8. 971	8. 946	8. 998	HH	120762	1321310	6. 72%	0. 250%	
118	9. 019	8. 998	9. 070	HH	16996	378881	1. 93%	0. 072%	
119	9. 090	9. 070	9. 098	HH	9933	137198	0. 70%	0. 026%	
120	9. 112	9. 098	9. 131	HH	12372	190074	0. 97%	0. 036%	
121	9. 145	9. 131	9. 174	HH	8330	187265	0. 95%	0. 035%	
122	9. 215	9. 174	9. 229	HH	21052	389903	1. 98%	0. 074%	
123	9. 247	9. 229	9. 273	HH	82474	918239	4. 67%	0. 174%	
124	9. 287	9. 273	9. 299	HH	8401	119330	0. 61%	0. 023%	
125	9. 310	9. 299	9. 325	HH	9239	126527	0. 64%	0. 024%	
126	9. 340	9. 325	9. 358	HH	8948	150689	0. 77%	0. 029%	
127	9. 391	9. 358	9. 412	HH	22143	396372	2. 02%	0. 075%	
128	9. 428	9. 412	9. 469	HH	19002	334689	1. 70%	0. 063%	
129	9. 487	9. 469	9. 511	HH	7226	149193	0. 76%	0. 028%	
130	9. 545	9. 511	9. 562	HH	20032	324398	1. 65%	0. 061%	
131	9. 576	9. 562	9. 607	HH	17909	278412	1. 42%	0. 053%	
132	9. 629	9. 607	9. 648	HH	13844	232148	1. 18%	0. 044%	
133	9. 681	9. 648	9. 705	HH	20247	387922	1. 97%	0. 073%	
134	9. 725	9. 705	9. 742	HH	15790	245217	1. 25%	0. 046%	
135	9. 764	9. 742	9. 818	HH	88063	1258831	6. 41%	0. 238%	
136	9. 845	9. 818	9. 861	HH	24163	396162	2. 02%	0. 075%	
137	9. 866	9. 861	9. 876	HH	12723	109256	0. 56%	0. 021%	
138	9. 887	9. 876	9. 896	HH	15277	168352	0. 86%	0. 032%	
139	9. 916	9. 896	9. 937	HH	37593	570984	2. 91%	0. 108%	
140	9. 946	9. 937	9. 959	HH	11925	150768	0. 77%	0. 029%	
141	9. 978	9. 959	10. 006	HH	24586	427139	2. 17%	0. 081%	

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142	10. 045	10. 006	10. 068	HH	59809	914331	4. 65%	0. 173%	
143	10. 090	10. 068	10. 112	HH	44943	661197	3. 36%	0. 125%	
144	10. 123	10. 112	10. 158	HH	15845	364659	1. 86%	0. 069%	
145	10. 189	10. 158	10. 236	HH	59175	1238347	6. 30%	0. 234%	
146	10. 254	10. 236	10. 276	HH	17419	320578	1. 63%	0. 061%	
147	10. 288	10. 276	10. 316	HH	12354	246977	1. 26%	0. 047%	
148	10. 357	10. 316	10. 386	HH	13099	417284	2. 12%	0. 079%	
149	10. 394	10. 386	10. 423	HH	8677	175816	0. 89%	0. 033%	
150	10. 459	10. 423	10. 472	HH	9268	240264	1. 22%	0. 045%	
151	10. 485	10. 472	10. 498	HH	10456	154899	0. 79%	0. 029%	
152	10. 517	10. 498	10. 548	HH	16186	353882	1. 80%	0. 067%	
153	10. 571	10. 548	10. 595	HH	16754	379372	1. 93%	0. 072%	
154	10. 627	10. 595	10. 639	HH	24532	469770	2. 39%	0. 089%	
155	10. 655	10. 639	10. 678	HH	35754	566156	2. 88%	0. 107%	
156	10. 695	10. 678	10. 735	HH	24591	550352	2. 80%	0. 104%	
157	10. 774	10. 735	10. 805	HH	30789	816251	4. 15%	0. 154%	
158	10. 828	10. 805	10. 886	HH	114502	1840204	9. 37%	0. 348%	
159	10. 928	10. 886	10. 933	HH	31175	607857	3. 09%	0. 115%	
160	10. 946	10. 933	10. 958	HH	42944	562178	2. 86%	0. 106%	
161	10. 979	10. 958	11. 022	HH	71977	1561932	7. 95%	0. 296%	
162	11. 036	11. 022	11. 040	HH	18414	189003	0. 96%	0. 036%	
163	11. 052	11. 040	11. 067	HH	21066	316035	1. 61%	0. 060%	
164	11. 083	11. 067	11. 102	HH	30903	507170	2. 58%	0. 096%	
165	11. 117	11. 102	11. 133	HH	20791	359881	1. 83%	0. 068%	
166	11. 150	11. 133	11. 157	HH	28602	360447	1. 83%	0. 068%	
167	11. 194	11. 157	11. 229	HH	1185668	14446867	73. 52%	2. 734%	
168	11. 258	11. 229	11. 278	HH	224075	2665542	13. 57%	0. 504%	
169	11. 286	11. 278	11. 304	HH	32030	436263	2. 22%	0. 083%	
170	11. 308	11. 304	11. 323	HH	21948	236355	1. 20%	0. 045%	
171	11. 331	11. 323	11. 343	HH	19954	226303	1. 15%	0. 043%	
172	11. 353	11. 343	11. 376	HH	19580	361160	1. 84%	0. 068%	
173	11. 393	11. 376	11. 407	HH	20151	349432	1. 78%	0. 066%	
174	11. 428	11. 407	11. 450	HH	42116	699646	3. 56%	0. 132%	
175	11. 473	11. 450	11. 513	HH	114155	1720130	8. 75%	0. 326%	
176	11. 554	11. 513	11. 558	HH	21193	502867	2. 56%	0. 095%	
177	11. 587	11. 558	11. 604	HH	27791	689736	3. 51%	0. 131%	
178	11. 632	11. 604	11. 655	HH	38126	880526	4. 48%	0. 167%	
179	11. 718	11. 655	11. 760	HH	56991	2234644	11. 37%	0. 423%	
180	11. 787	11. 760	11. 808	HH	43326	887397	4. 52%	0. 168%	
181	11. 835	11. 808	11. 856	HH	36830	847234	4. 31%	0. 160%	
182	11. 878	11. 856	11. 905	HH	39788	887239	4. 52%	0. 168%	
183	11. 912	11. 905	11. 924	HH	25351	287742	1. 46%	0. 054%	
184	11. 943	11. 924	11. 961	HH	33335	613287	3. 12%	0. 116%	
185	11. 989	11. 961	12. 005	HH	142724	2029974	10. 33%	0. 384%	
186	12. 022	12. 005	12. 046	HH	194085	2498283	12. 71%	0. 473%	
187	12. 053	12. 046	12. 062	HH	30255	298906	1. 52%	0. 057%	
188	12. 104	12. 062	12. 122	HH	137233	2678656	13. 63%	0. 507%	
189	12. 138	12. 122	12. 153	HH	113211	1414067	7. 20%	0. 268%	
190	12. 170	12. 153	12. 199	HH	138407	2043027	10. 40%	0. 387%	
191	12. 218	12. 199	12. 226	HH	31776	469186	2. 39%	0. 089%	
192	12. 254	12. 226	12. 274	HH	42935	1028994	5. 24%	0. 195%	
193	12. 310	12. 274	12. 332	HH	50458	1376537	7. 01%	0. 260%	
194	12. 356	12. 332	12. 392	HH	208928	3242691	16. 50%	0. 614%	

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195	12. 397	12. 392	12. 421	HH	39487	645300	3. 28%	0. 122%	
196	12. 426	12. 421	12. 436	HH	35228	308644	1. 57%	0. 058%	
197	12. 461	12. 436	12. 486	HH	123100	2032110	10. 34%	0. 385%	
198	12. 520	12. 486	12. 540	HH	43917	1288231	6. 56%	0. 244%	
199	12. 570	12. 540	12. 596	HH	144182	2611130	13. 29%	0. 494%	
200	12. 608	12. 596	12. 623	HH	50270	765780	3. 90%	0. 145%	
201	12. 644	12. 623	12. 684	HH	67787	1843613	9. 38%	0. 349%	
202	12. 709	12. 684	12. 729	HH	64857	1389526	7. 07%	0. 263%	
203	12. 738	12. 729	12. 755	HH	50015	709354	3. 61%	0. 134%	
204	12. 785	12. 755	12. 797	HH	73914	1479217	7. 53%	0. 280%	
205	12. 801	12. 797	12. 824	HH	61844	813847	4. 14%	0. 154%	
206	12. 854	12. 824	12. 871	HH	114859	2065898	10. 51%	0. 391%	
207	12. 892	12. 871	12. 920	HH	151567	3075354	15. 65%	0. 582%	
208	12. 950	12. 920	12. 962	HH	81938	1852133	9. 43%	0. 350%	
209	12. 967	12. 962	12. 989	HH	78889	1110981	5. 65%	0. 210%	
210	13. 034	12. 989	13. 061	HH	1299292	19649627	100. 00%	3. 718%	
211	13. 080	13. 061	13. 098	HH	55120	1058907	5. 39%	0. 200%	
212	13. 115	13. 098	13. 133	HH	54151	1041784	5. 30%	0. 197%	
213	13. 151	13. 133	13. 165	HH	76378	1234972	6. 28%	0. 234%	
214	13. 201	13. 165	13. 218	HH	99138	2398955	12. 21%	0. 454%	
215	13. 234	13. 218	13. 273	HH	102806	2455068	12. 49%	0. 465%	
216	13. 277	13. 273	13. 289	HH	53839	490311	2. 50%	0. 093%	
217	13. 333	13. 289	13. 358	HH	1162837	17126704	87. 16%	3. 241%	
218	13. 373	13. 358	13. 387	HH	158703	2092925	10. 65%	0. 396%	
219	13. 403	13. 387	13. 431	HH	182558	2771710	14. 11%	0. 525%	
220	13. 455	13. 431	13. 471	HH	58140	1277011	6. 50%	0. 242%	
221	13. 488	13. 471	13. 503	HH	95846	1447595	7. 37%	0. 274%	
222	13. 520	13. 503	13. 543	HH	108131	1903423	9. 69%	0. 360%	
223	13. 582	13. 543	13. 607	HH	129739	3001259	15. 27%	0. 568%	
224	13. 619	13. 607	13. 627	HH	68557	813886	4. 14%	0. 154%	
225	13. 653	13. 627	13. 683	HH	83598	2271649	11. 56%	0. 430%	
226	13. 713	13. 683	13. 727	HH	98586	1892794	9. 63%	0. 358%	
227	13. 737	13. 727	13. 754	HH	78162	1213696	6. 18%	0. 230%	
228	13. 777	13. 754	13. 841	HH	159833	4691096	23. 87%	0. 888%	
229	13. 847	13. 841	13. 860	HH	59432	679026	3. 46%	0. 128%	
230	13. 909	13. 860	13. 943	HH	223889	5828198	29. 66%	1. 103%	
231	13. 975	13. 943	13. 992	HH	84209	2100542	10. 69%	0. 397%	
232	14. 018	13. 992	14. 038	HH	197981	3403426	17. 32%	0. 644%	
233	14. 057	14. 038	14. 078	HH	174100	2802205	14. 26%	0. 530%	
234	14. 096	14. 078	14. 120	HH	97385	2089455	10. 63%	0. 395%	
235	14. 156	14. 120	14. 160	HH	111009	2214944	11. 27%	0. 419%	
236	14. 188	14. 160	14. 210	HH	174069	3896842	19. 83%	0. 737%	
237	14. 227	14. 210	14. 269	HH	166647	3622920	18. 44%	0. 686%	
238	14. 302	14. 269	14. 322	HH	95044	2579069	13. 13%	0. 488%	
239	14. 343	14. 322	14. 357	HH	77592	1564059	7. 96%	0. 296%	
240	14. 373	14. 357	14. 417	HH	86840	2905056	14. 78%	0. 550%	
241	14. 439	14. 417	14. 458	HH	79112	1861213	9. 47%	0. 352%	
242	14. 467	14. 458	14. 477	HH	73223	809734	4. 12%	0. 153%	
243	14. 495	14. 477	14. 519	HH	84010	1967240	10. 01%	0. 372%	
244	14. 523	14. 519	14. 528	HH	74685	397788	2. 02%	0. 075%	
245	14. 548	14. 528	14. 564	HH	80194	1646211	8. 38%	0. 312%	
246	14. 617	14. 564	14. 632	HH	120625	4003723	20. 38%	0. 758%	

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247	14. 653	14. 632	14. 683	HH	218480	4182246	21. 28%	0. 791%	
248	14. 718	14. 683	14. 737	HH	119035	3126867	15. 91%	0. 592%	
249	14. 751	14. 737	14. 788	HH	108378	2974794	15. 14%	0. 563%	
250	14. 791	14. 788	14. 802	HH	88161	690008	3. 51%	0. 131%	
251	14. 826	14. 802	14. 847	HH	189160	3831363	19. 50%	0. 725%	
252	14. 857	14. 847	14. 869	HH	116120	1446913	7. 36%	0. 274%	
253	14. 893	14. 869	14. 917	HH	274483	5060866	25. 76%	0. 958%	
254	14. 960	14. 917	14. 994	HH	225192	6503287	33. 10%	1. 231%	
255	15. 014	14. 994	15. 032	HH	110077	2276476	11. 59%	0. 431%	
256	15. 061	15. 032	15. 130	HH	208797	7568383	38. 52%	1. 432%	
257	15. 165	15. 130	15. 182	HH	138313	3507114	17. 85%	0. 664%	
258	15. 218	15. 182	15. 237	HH	670938	11401109	58. 02%	2. 157%	
259	15. 263	15. 237	15. 284	HH	722577	10795816	54. 94%	2. 043%	
260	15. 299	15. 284	15. 324	HH	117619	2625845	13. 36%	0. 497%	
261	15. 372	15. 324	15. 423	HH	235756	8302314	42. 25%	1. 571%	
262	15. 452	15. 423	15. 483	HH	155958	4505359	22. 93%	0. 853%	
263	15. 515	15. 483	15. 535	HH	174854	4187572	21. 31%	0. 792%	
264	15. 553	15. 535	15. 587	HH	152437	4348214	22. 13%	0. 823%	
265	15. 599	15. 587	15. 619	HH	125930	2351955	11. 97%	0. 445%	
266	15. 650	15. 619	15. 685	HH	194326	6014683	30. 61%	1. 138%	
267	15. 698	15. 685	15. 731	HH	140437	3468257	17. 65%	0. 656%	
268	15. 749	15. 731	15. 768	HH	125719	2700487	13. 74%	0. 511%	
269	15. 805	15. 768	15. 825	HH	158133	4793126	24. 39%	0. 907%	
270	15. 841	15. 825	15. 856	HH	150759	2619237	13. 33%	0. 496%	
271	15. 888	15. 856	15. 908	HH	295374	6354903	32. 34%	1. 203%	
272	15. 925	15. 908	15. 955	HH	197316	4552075	23. 17%	0. 861%	
273	15. 974	15. 955	15. 990	HH	148753	2998585	15. 26%	0. 567%	
274	16. 002	15. 990	16. 006	HH	149395	1358900	6. 92%	0. 257%	
275	16. 043	16. 006	16. 085	HH	213439	8350346	42. 50%	1. 580%	
276	16. 100	16. 085	16. 105	HH	144124	1694328	8. 62%	0. 321%	
277	16. 125	16. 105	16. 151	HH	173813	4262967	21. 69%	0. 807%	
278	16. 168	16. 151	16. 185	HH	147052	2866218	14. 59%	0. 542%	
279	16. 209	16. 185	16. 231	HH	174601	4121664	20. 98%	0. 780%	
280	16. 256	16. 231	16. 288	HH	169925	5373044	27. 34%	1. 017%	
281	16. 296	16. 288	16. 302	HH	161598	1424422	7. 25%	0. 270%	
282	16. 325	16. 302	16. 353	HH	165838	4749987	24. 17%	0. 899%	
283	16. 387	16. 353	16. 407	HH	158086	4885232	24. 86%	0. 924%	
284	16. 417	16. 407	16. 427	HH	150688	1790938	9. 11%	0. 339%	
285	16. 430	16. 427	16. 442	HH	148651	1256670	6. 40%	0. 238%	
286	16. 445	16. 442	16. 452	HH	150212	888588	4. 52%	0. 168%	
287	16. 487	16. 452	16. 501	HH	181351	4891036	24. 89%	0. 926%	
288	16. 520	16. 501	16. 546	HH	187216	4763630	24. 24%	0. 901%	
289	16. 569	16. 546	16. 614	HH	202688	7488061	38. 11%	1. 417%	
290	16. 638	16. 614	16. 650	HH	184823	3872828	19. 71%	0. 733%	
291	16. 668	16. 650	16. 675	HH	194521	2779589	14. 15%	0. 526%	
292	16. 699	16. 675	16. 717	HH	216040	5150832	26. 21%	0. 975%	
293	16. 736	16. 717	16. 751	HH	209477	4030654	20. 51%	0. 763%	
294	16. 802	16. 751	16. 815	HH	757489	18121994	92. 23%	3. 429%	
295	16. 823	16. 815	16. 846	HH	532353	6505065	33. 11%	1. 231%	
296	16. 852	16. 846	16. 857	HH	202068	1276522	6. 50%	0. 242%	
297	16. 860	16. 857	16. 882	HH	201630	3063716	15. 59%	0. 580%	
298	16. 919	16. 882	16. 943	HH	331153	8908628	45. 34%	1. 686%	
299	16. 947	16. 943	16. 962	HH	221439	2528265	12. 87%	0. 478%	

						rteres			
300	16. 972	16. 962	16. 999	HH	211081	4573442	23. 27%	0. 865%	
301	17. 004	16. 999	17. 014	HH	206344	1841453	9. 37%	0. 348%	
302	17. 039	17. 014	17. 054	HH	226628	5231378	26. 62%	0. 990%	
303	17. 121	17. 054	17. 144	HH	604701	18613959	94. 73%	3. 522%	
304	17. 185	17. 144	17. 211	HH	756619	16800599	85. 50%	3. 179%	
305	17. 274	17. 211	17. 301	HH	410868	14817904	75. 41%	2. 804%	
306	17. 321	17. 301	17. 354	HH	275773	7985427	40. 64%	1. 511%	
307	17. 376	17. 354	17. 388	HH	253091	5008452	25. 49%	0. 948%	
					Sum of corrected areas:	528443468			

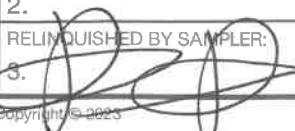
FG011325. M Sat Feb 01 02:16:40 2025



# SHIPPING DOCUMENTS

CLIENT INFORMATION		CLIENT PROJECT INFORMATION				CLIENT BILLING INFORMATION								
REPORT TO BE SENT TO:		PROJECT NAME: SAND Two BR BMCR Project				BILL TO: Same as Company address PO#:								
COMPANY:	RU2 Engineering LLC	PROJECT NO.:		LOCATION: Brooklyn, NYC		ADDRESS:								
ADDRESS:	2 Melinda Drive					CITY	STATE:	ZIP:						
CITY														
ATTENTION:	Ruty Manani					ATTENTION:	PHONE:							
PHONE:	609-409-4964	FAX:				ANALYSIS								
DATA TURNAROUND INFORMATION						DATA DELIVERABLE INFORMATION								
FAX (RUSH)	Standard 10 days	DAYS*		Level 1 (Results Only)		Level 4 (QC + Full Raw Data)		1 TLL Voet TCE MTBE TBA						
HARDCOPY (DATA PACKAGE)	Standard 10 days	DAYS*		Level 2 (Results + QC)		NJ Reduced		2 TLL VOS		3 TPH 620-DRO				
EDD:	Standard 10 days	DAYS*		Level 3 (Results + QC)		US EPA CLP		4 TAL SVOCs TTB		5 TAL Metals				
*TO BE APPROVED BY CHEMTECH						+ Raw Data)		6 Pesticides PCBs		7 RCRA characteris				
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS DAYS						Other		8 Paint filters		9 full TCLP				
CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE	SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES						COMMENTS	
			COMP	GRAB	DATE		TIME	1	2	3	4	5	6	7
1.	JPP-46.2-012925	Soil	G	01/29/25	9:00	3	X	X	X					← Specify Preservatives A-HCl B-HNO3 C-H <sub>2</sub> SO <sub>4</sub> D-NaOH E-ICP F-OTHER
2.	JPP-46.2-012925	Soil	L	1/29/25	9:05	8			X	X	X	X	X	
3.	JPP-46.1-012925	Soil	G	1/29/25	10:10	3	X	X	X					
4.	JPP-46.1-012925	Soil	L	1/29/25	10:18	8			X	X	X	X	X	
5.	JPP-42.1-012925	Soil	G	1/29/25	11:24	3	X	X	X					
6.	JPP-42.1-012925	Soil	C	1/29/25	11:30	8			X	X	X	X	X	
7.	JPP-42.2-012925	Soil	G	1/29/25	12:24	3	X	X	X					
8.	JPP-42.2-012925	Soil	L	1/29/25	12:30	8			X	X	X	X	X	
9.	JPP-51.1-012925	Soil	G	1/29/25	14:14	3	X	X	X					
10.	JPP-51.1-012925	Soil	L	1/29/25	14:20	8			X	X	X	X	X	

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

RELINQUISHED BY SAMPLER: 1. RA	DATE/TIME: 1/30/2025	RECEIVED BY:  1045 1-30-25	Conditions of bottles or coolers at receipt: <input type="checkbox"/> COMPLIANT <input type="checkbox"/> NON COMPLIANT <input type="checkbox"/> COOLER TEMP 31 °C
RELINQUISHED BY SAMPLER: 2.	DATE/TIME:	RECEIVED BY: 2.	Comments: Preserve extra sample jar if additional analysis is required.
RELINQUISHED BY SAMPLER: 3. 	DATE/TIME: 1152	RECEIVED BY: 3.	CLIENT: <input type="checkbox"/> Hand Delivered <input type="checkbox"/> Other _____ CHEMTECH: <input type="checkbox"/> Picked Up <input type="checkbox"/> Field Sampling
Page 1 of 2			Shipment Complete <input type="checkbox"/> YES <input type="checkbox"/> NO

**Laboratory Certification**

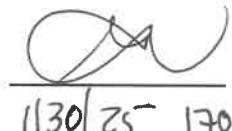
<b>Certified By</b>	<b>License No.</b>
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255424 Rev 1
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488

## LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q1232	RUTW01	Order Date : 1/30/2025 11:55:00 AM	Project Mgr : Kiran
Client Name : RU2 Engineering, LLC		Project Name : NYCDCC SANTWOBR Bi	Report Type : NYS ASP B
Client Contact : Rutu Manani		Receive DateTime : 1/30/2025 11:52:00 AM	EDD Type : Excel NY
Invoice Name : RU2 Engineering, LLC		Purchase Order :	Hard Copy Date :
Invoice Contact : Rutu Manani			Date Signoff : 1/30/2025 1:25:39 PM

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUe DATES
Q1232-01	JPP-46.2-012925	Solid	01/29/2025	09:00	VOCMS Group1		8260D	10 Bus. Days	
Q1232-05	JPP-46.1-012925	Solid	01/29/2025	10:10	VOCMS Group1		8260D	10 Bus. Days	
Q1232-09	JPP-42.1-012925	Solid	01/29/2025	11:24	VOCMS Group1		8260D	10 Bus. Days	
Q1232-13	JPP-42.2-012925	Solid	01/29/2025	12:24	VOCMS Group1		8260D	10 Bus. Days	
Q1232-17	JPP-51.1-012925	Solid	01/29/2025	14:14	VOCMS Group1		8260D	10 Bus. Days	

Relinquished By :



Date / Time : 1/30/25 17:00

Received By :



Date / Time : 1-30-25 - 17:00

Storage Area : VOA Refrigerator Room

## LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q1232	RUTW01	Order Date : 1/30/2025 11:55:00 AM	Project Mgr : Kiran
Client Name : RU2 Engineering, LLC		Project Name : NYCDCC SANTWOBR B1	Report Type : NYS ASP B
Client Contact : Rutu Manani		Receive DateTime : 1/30/2025 11:52:00 AM	EDD Type : Excel NY
Invoice Name : RU2 Engineering, LLC		Purchase Order :	Hard Copy Date :
Invoice Contact : Rutu Manani			Date Signoff : 1/30/2025 1:25:39 PM

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUe DATES
Q1232-01	JPP-46.2-012925	Solid	01/29/2025	09:00					
					Gasoline Range Organics		8015D	10 Bus. Days	
Q1232-05	JPP-46.1-012925	Solid	01/29/2025	10:10					
					Gasoline Range Organics		8015D	10 Bus. Days	
Q1232-09	JPP-42.1-012925	Solid	01/29/2025	11:24					
					Gasoline Range Organics		8015D	10 Bus. Days	
Q1232-13	JPP-42.2-012925	Solid	01/29/2025	12:24					
					Gasoline Range Organics		8015D	10 Bus. Days	
Q1232-17	JPP-51.1-012925	Solid	01/29/2025	14:14					
					Gasoline Range Organics		8015D	10 Bus. Days	

Relinquished By :



Date / Time : 1/30/25 17:00

Received By :



Date / Time : 1-30-25 17:00

Storage Area : VOA Refrigerator Room