

**DATA PACKAGE**  
**GC SEMI-VOLATILES**

**PROJECT NAME : NJ SOIL PT**

**ALLIANCE TECHNICAL GROUP, LLC - NEWARK**

**284 Sheffiled Stree**

**Suite 1**

**Mountainside, NJ - 07092**

**Phone No: 908-789-8900**

**ORDER ID : Q1872**

**ATTENTION : Mohammad Ahmed**



**Laboratory Certification ID # 20012**



|  |     |    |
|--|-----|----|
| 1) DIESEL RANGE ORGANICS Data                | 2   | 1  |
| 2) Signature Page                            | 4   | 2  |
| 3) Case Narrative                            | 5   | 3  |
| 4) Qualifier Page                            | 7   | 4  |
| 5) Conformance/Non Conformance               | 8   | 5  |
| 6) QA Checklist                              | 10  | 6  |
| 7) Chronicle                                 | 11  | 7  |
| 8) QC Data Summary For Diesel Range Organics | 12  | 8  |
| 8.1) Deuterated Monitoring Compound Summary  | 13  | 9  |
| 8.2) MS/MSD Summary                          | 14  | 10 |
| 8.3) LCS/LCSD Summary                        | 16  | 11 |
| 8.4) Method Blank Summary                    | 17  | 12 |
| 9) Sample Data                               | 18  | 13 |
| 9.1) HW0425-PT-DIES-SOIL                     | 19  | 14 |
| 10) Calibration Data Summary                 | 30  | 15 |
| 10.1) Initial Calibration Data               | 31  | 16 |
| 10.1.1) FG042425                             | 31  | 17 |
| 10.2) Continued Calibration Data             | 80  | 18 |
| 10.2.1) FG015818.D                           | 80  |    |
| 10.2.2) FG015825.D                           | 87  |    |
| 10.2.3) FG015835.D                           | 94  |    |
| 10.3) Analytical Seq                         | 101 |    |
| 11) QC Sample Data                           | 102 |    |
| 11.1) Method Blank Data                      | 103 |    |
| 11.2) PIBLK Data                             | 108 |    |
| 11.3) LCS Data                               | 123 |    |
| 11.4) MS Data                                | 130 |    |
| 11.5) MSD Data                               | 143 |    |
| 12) Manual Integration                       | 156 |    |
| 13) Analytical Runlogs                       | 157 |    |
| 14) Percent Solid                            | 163 |    |
| 15) Extraction Logs                          | 173 |    |
| 15.1) PB167975.pdf                           | 173 |    |
| 15.2) PB167975IC.pdf                         | 175 |    |
| 16) Standard Prep Logs                       | 176 |    |

Table Of Contents for Q1872

|                        |     |
|------------------------|-----|
| 17) Miscellaneous Data | 232 |
| 18) Shipping Document  | 242 |
| 18.1) Chain Of Custody | 243 |
| 18.2) Lab Certificate  | 245 |

|    |
|----|
| 1  |
| 2  |
| 3  |
| 4  |
| 5  |
| 6  |
| 7  |
| 8  |
| 9  |
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| 15 |
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## Cover Page

**Order ID :** Q1872

**Project ID :** NJ Soil PT

**Client :** Alliance Technical Group, LLC - Newark

### Lab Sample Number

Q1872-01  
Q1872-02  
Q1872-03  
Q1872-04  
Q1872-05  
Q1872-06  
Q1872-07  
Q1872-08  
Q1872-09  
Q1872-10  
Q1872-11  
Q1872-12  
Q1872-13  
Q1872-14  
Q1872-15  
Q1872-16  
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Q1872-18  
Q1872-19  
Q1872-20  
Q1872-21  
Q1872-22  
Q1872-23  
Q1872-24  
Q1872-25

### Client Sample Number

HW0425-PT-AN-SOIL  
HW0425-PT-CORR-SOIL  
HW0425-PT-CN-SOIL  
HW0425-PT-CN-SOIL  
HW0425-PT-FP-SOIL  
HW0425-PT-CR6-SOIL  
HW0425-PT-NUT-SOIL  
HW0425-PT-NUT-SOIL  
HW0425-PT-OGR-SOIL  
HW0425-PT-MET-SOIL  
HW0425-PT-BNA-SOIL  
HW0425-PT-TRIAZINE-SOIL  
HW0425-PT-PAH-SOIL  
HW0425-PT-DIES-SOIL  
HW0425-PT-GAS-SOIL  
HW0425-PT-NJEPH-SOIL  
HW0425-PT-HERB-SOIL  
HW0425-PT-PCB-SOIL  
HW0425-PT-PCBO-SOIL  
HW0425-PT-PEST-SOIL  
HW0425-PT-CHLR-SOIL  
HW0425-PT-TXP-SOIL  
HW0425-PT-VOA-SOIL  
HW0425-PT-SOL-SOIL  
HW0425-PT-NO2-SOIL

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

Signature :

**APPROVED**

*By Nimisha Pandya, QA/QC Supervisor at 9:43 am, Jul 23, 2025*

Date: 5/27/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

## CASE NARRATIVE

**Alliance Technical Group, LLC - Newark**

**Project Name: NJ Soil PT**

**Project # N/A**

**Order ID # Q1872**

**Test Name: Diesel Range Organics**

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

24 Solid samples were received on 04/24/2025.

1 Solid sample was received on 04/28/2025.

### **B. Parameters**

According to the Chain of Custody document, the following analyses were requested: Ammonia, Anions Group1, Anions Group2, Corrosivity, Cyanide, Diesel Range Organics, EPH, Flash Point, Gasoline Range Organics, Herbicide Group1, Hexavalent Chromium, Mercury, Metals Group3, Metals ICP-Group1, Oil and Grease, PCB, PESTICIDE Group1, PESTICIDE Group2, PESTICIDE Group3, Phosphorus, Total, SVOCMS Group1, SVOCMS Group2, SVOCMS Group3, SVOCMS Group4, SVOCMS Group5, TKN, TOC, TS and VOCMS Group1. This data package contains results for Diesel Range Organics.

### **C. Analytical Techniques:**

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

### **D. QA/ QC Samples:**

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Retention Times were acceptable for all samples.

The MS recoveries met the requirements for all compounds .

The MSD recoveries met the acceptable requirements .

The RPD met criteria .

The Blank Spike met requirements for all samples .

The Blank analysis did not indicate the presence of lab contamination.

The Initial Calibration met the requirements .

The Continuous Calibration met the requirements .

Samples HW0425-PT-DIES-SOIL was diluted due to bad matrix, 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.

---

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.

**APPROVED**

*By Nimisha Pandya, QA/QC Supervisor at 9:44 am, Jul 23, 2025*

Signature \_\_\_\_\_

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## DATA REPORTING QUALIFIERS- ORGANIC

For reporting results, the following “ Results Qualifiers” are used:

|           |  |
|-----------|--|
| Value     | If the result is a value greater than or equal to the detection limit, report the value  |
| <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:<br>(1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed.)<br>(2) When the mass spectral data indicated the identification, however the result was less than the specified detection limit greater than zero. If the detection limit was 10ug/L and a concentration of 3 ug/L was calculated report as 3 J. This is flag is used when similar situation arise on any organic parameter i.e. Pest, PCB and others. |
| <b>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   |



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

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

ORDER ID: Q1872

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.<br><br>The Initial Calibration met the requirements .<br>The Continuous Calibration met the requirements .  |    |    | ✓   |
| 4. Blank Contamination - If yes, list compounds and concentrations in each blank:   |    | ✓  |     |
| 5. Surrogate Recoveries Meet Criteria<br><br>If not met, list those compounds and their recoveries which fall outside the acceptable ranges.  |    |    | ✓   |
| 6. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria<br><br>If not met, list those compounds and their recoveries which fall outside the acceptable range.<br><br>The MS recoveries met the requirements for all compounds .<br>The MSD recoveries met the acceptable requirements .<br>The Blank Spike met requirements for all samples .<br>The RPD met criteria . |    |    | ✓   |
| 7. Retention Time Shift Meet Criteria (if applicable)<br><br>Comments:  |    |    | ✓   |
| 8. Extraction Holding Time Met<br><br>If not met, list number of days exceeded for each sample:   |    | ✓  |     |



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

|  | NA | NO | YES |
|--|----|----|-----|
| 9. Analysis Holding Time Met   |    | ✓  |     |
| If not met, list those compounds and their recoveries which fall outside the acceptable range. |    |    |     |
| The Holding Times were met for all analysis.   |    |    |     |

**ADDITIONAL COMMENTS:**

Samples HW0425-PT-DIES-SOIL was diluted due to bad matrix, The above sample original run is reported as screening data in miscellaneous data.

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

**REVIEWED**

*By Sohil Jodhani, QA/QC Director at 8:36 am, Jul 23, 2025*

QA REVIEW

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**APPENDIX A**

**QA REVIEW GENERAL DOCUMENTATION**

Project #: Q1872

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 Custody ✓

Were the samples received within hold time ✓

Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle ✓

**ANALYTICAL:**

Was method requirement followed? ✓

Was client requirement followed? ✓

Does the case narrative summarize all QC failure? ✓

All runlogs and manual integration are reviewed for requirements ✓

All manual calculations and /or hand notations verified ✓

QA Review Signature: SOHIL JODHANI

Date: 05/27/2025

**LAB CHRONICLE**

|   |  |
|---|--|
| <b>OrderID:</b> Q1872                                 | <b>OrderDate:</b> 4/24/2025 1:26:50 PM |
| <b>Client:</b> Alliance Technical Group, LLC - Newark | <b>Project:</b> NJ Soil PT             |
| <b>Contact:</b> Mohammad Ahmed                        | <b>Location:</b> QA Office,VOA Lab     |

| LabID    | ClientID                 | Matrix | Test                    | Method | Sample Date | Prep Date | Anal Date | Received |
|----------|--------------------------|--------|-------------------------|--------|-------------|-----------|-----------|----------|
| Q1872-14 | HW0425-PT-DIES-SOIL<br>L | SOIL   | Diesel Range Organics   | 8015D  | 04/25/25    | 05/13/25  | 05/13/25  | 04/28/25 |
| Q1872-15 | HW0425-PT-GAS-SOIL<br>L  | SOIL   | Gasoline Range Organics | 8015D  | 04/21/25    |           | 04/29/25  | 04/24/25 |



# QC SUMMARY

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**SOIL DIESEL RANGE ORGANICS SURROGATE RECOVERY**

Lab Name: Chemtech Client: Alliance Technical Group, LLC - Newark  
 Lab Code: CHEM Case No.: Q1872 SAS No.: Q1872 SDG No.: Q1872

| EPA<br>SAMPLE NO.   | S1<br>TETRACOSANE-d50 | S2 | S3 | S4 | TOT<br>OUT |
|---------------------|-----------------------|----|----|----|------------|
| PIBLK-FG015817.D    | 96                    |    |    |    | 0          |
| PIBLK-FG015824.D    | 85                    |    |    |    | 0          |
| PIBLK-FG015834.D    | 96                    |    |    |    | 0          |
| PB167975BL          | 87                    |    |    |    | 0          |
| PB167975BS          | 93                    |    |    |    | 0          |
| HW0425-PT-DIES-SOIL | 42                    |    |    |    | 0          |
| SB2-4-5MS           | 58                    |    |    |    | 0          |
| SB2-4-5MSD          | 60                    |    |    |    | 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



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

**Lab Name:** Chemtech **Client:** Alliance Technical Group, LLC - Newark  
**Lab Code:** CHEM **Cas No:** Q1872 **SAS No :** Q1872 **SDG No:** Q1872  
**Client SampleID :** SB2-4-5MS **Datafile:** FG015828.D

| COMPOUND | SPIKE<br>ADDED<br>ug/kg | SAMPLE<br>CONCENTRATION<br>ug/kg | MS/MSD<br>CONCENTRATION<br>ug/kg | % REC | Qual | QC LIMITS |
|----------|-------------------------|----------------------------------|----------------------------------|-------|------|-----------|
| DRO      | 7123                    | 0                                | 7673                             | 108%  |      | 68-131    |

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

**Lab Name:** Chemtech **Client:** Alliance Technical Group, LLC - Newark  
**Lab Code:** CHEM **Cas No:** Q1872 **SAS No :** Q1872 **SDG No:** Q1872  
**Client SampleID :** SB2-4-5MSD **Datafile:** FG015829.D

| COMPOUND | SPIKE ADDED<br>ug/kg | SAMPLE CONCENTRATION<br>ug/kg | MS/MSD CONCENTRATION<br>ug/kg | % REC | Qual | QC LIMITS |
|----------|----------------------|-------------------------------|-------------------------------|-------|------|-----------|
| DRO      | 7121                 | 0                             | 7822                          | 110%  |      | 68-131    |

MS/MSD % Recovery RPD : 1.9

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

**Lab Name:** Chemtech **Client:** Alliance Technical Group, LLC - Newark  
**Lab Code:** CHEM **Cas No:** Q1872 **SAS No :** Q1872 **SDG No:** Q1872  
**Matrix Spike - EPA Sample No :** PB167975BS **Datafile:** FG015821.D

| COMPOUND | SPIKE ADDED<br>ug/kg | CONCENTRATION<br>ug/kg | LCS/LCSD<br>CONCENTRATION<br>ug/kg | % REC | QC LIMITS |
|----------|----------------------|------------------------|------------------------------------|-------|-----------|
| DRO      | 6662                 | 0                      | 6321                               | 95    | 68-131    |

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4B  
 METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB167975BL

Lab Name: CHEMTECH Contract: ALLI03  
 Lab Code: CHEM Case No.: Q1872 SAS No.: Q1872 SDG NO.: Q1872  
 Lab File ID: FG015820.D Lab Sample ID: PB167975BL  
 Instrument ID: FG Date Extracted: 05/13/2025  
 Matrix: (soil/water) Soil Date Analyzed: 05/13/25  
 Level: (low/med) low Time Analyzed: 13:22

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

| EPA<br>SAMPLE NO.   | LAB<br>SAMPLE ID | LAB<br>FILE ID | DATE<br>ANALYZED |
|---------------------|------------------|----------------|------------------|
| PB167975BS          | PB167975BS       | FG015821.D     | 05/13/25         |
| HW0425-PT-DIES-SOIL | Q1872-14         | FG015823.D     | 05/13/25         |
| SB2-4-5MS           | Q1956-03MS       | FG015828.D     | 05/13/25         |
| SB2-4-5MSD          | Q1956-04MSD      | FG015829.D     | 05/13/25         |

COMMENTS: \_\_\_\_\_



# SAMPLE DATA

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### Report of Analysis

|                    |  |                    |                       |
|--------------------|--|--------------------|-----------------------|
| Client:            | Alliance Technical Group, LLC - Newark | Date Collected:    | 04/25/25              |
| Project:           | NJ Soil PT                             | Date Received:     | 04/28/25              |
| Client Sample ID:  | HW0425-PT-DIES-SOIL                    | SDG No.:           | Q1872                 |
| Lab Sample ID:     | Q1872-14                               | Matrix:            | SOIL                  |
| Analytical Method: | 8015D DRO                              | % Solid:           | 100                   |
| Sample Wt/Vol:     | 20.24                                  | Units:             | g                     |
| Soil Aliquot Vol:  |  |                    | uL                    |
| Extraction Type:   |  | Final Vol:         | 1                     |
| GPC Factor :       |  | PH :               |                       |
| Prep Method :      | SW3541                                 | Decanted:          |                       |
|                    |  | Test:              | Diesel Range Organics |
|                    |  | Injection Volume : |                       |

|                   |           |                |                |               |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date      | Date Analyzed  | Prep Batch ID |
| FG015823.D        | 5         | 05/13/25 10:05 | 05/13/25 15:25 | PB167975      |

| CAS Number        | Parameter       | Conc.  | Qualifier | MDL      | LOQ / CRQL | Units(Dry Weight) |
|-------------------|-----------------|--------|-----------|----------|------------|-------------------|
| <b>TARGETS</b>    |                 |        |           |          |            |                   |
| DRO               | DRO             | 120000 |           | 1250     | 12400      | ug/kg             |
| <b>SURROGATES</b> |                 |        |           |          |            |                   |
| 16416-32-3        | Tetracosane-d50 | 1.68   |           | 37 - 130 | 42%        | 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\FG051325\  
 Data File : FG015823.D  
 Signal(s) : FID1A.ch  
 Acq On : 13 May 2025 15:25  
 Operator : YP\AJ  
 Sample : Q1872-14 5X  
 Misc :  
 ALS Vial : 24 Sample Multiplier: 1

**Instrument :**  
 FID\_G  
**ClientSampleId :**  
 HW0425-PT-DIES-SOIL

**Manual Integrations**  
**APPROVED**

Reviewed By :Yogesh Patel 05/14/2025  
 Supervised By :mohammad ahmed 05/15/2025

Integration File: autoint1.e  
 Quant Time: May 14 03:55:16 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
 Quant Title :  
 QLast Update : Thu Apr 24 12:54:09 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

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

| Compound                      | R.T.   | Response | Conc Units   |
|-------------------------------|--------|----------|--------------|
| -----                         |        |          |              |
| System Monitoring Compounds   |        |          |              |
| 9) S TETRACOSANE-d50 (SURR... | 14.994 | 198280   | 1.684 ug/mlm |

Target Compounds

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG051325\  
Data File : FG015823.D  
Signal(s) : FID1A.ch  
Acq On : 13 May 2025 15:25  
Operator : YP\AJ  
Sample : Q1872-14 5X  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

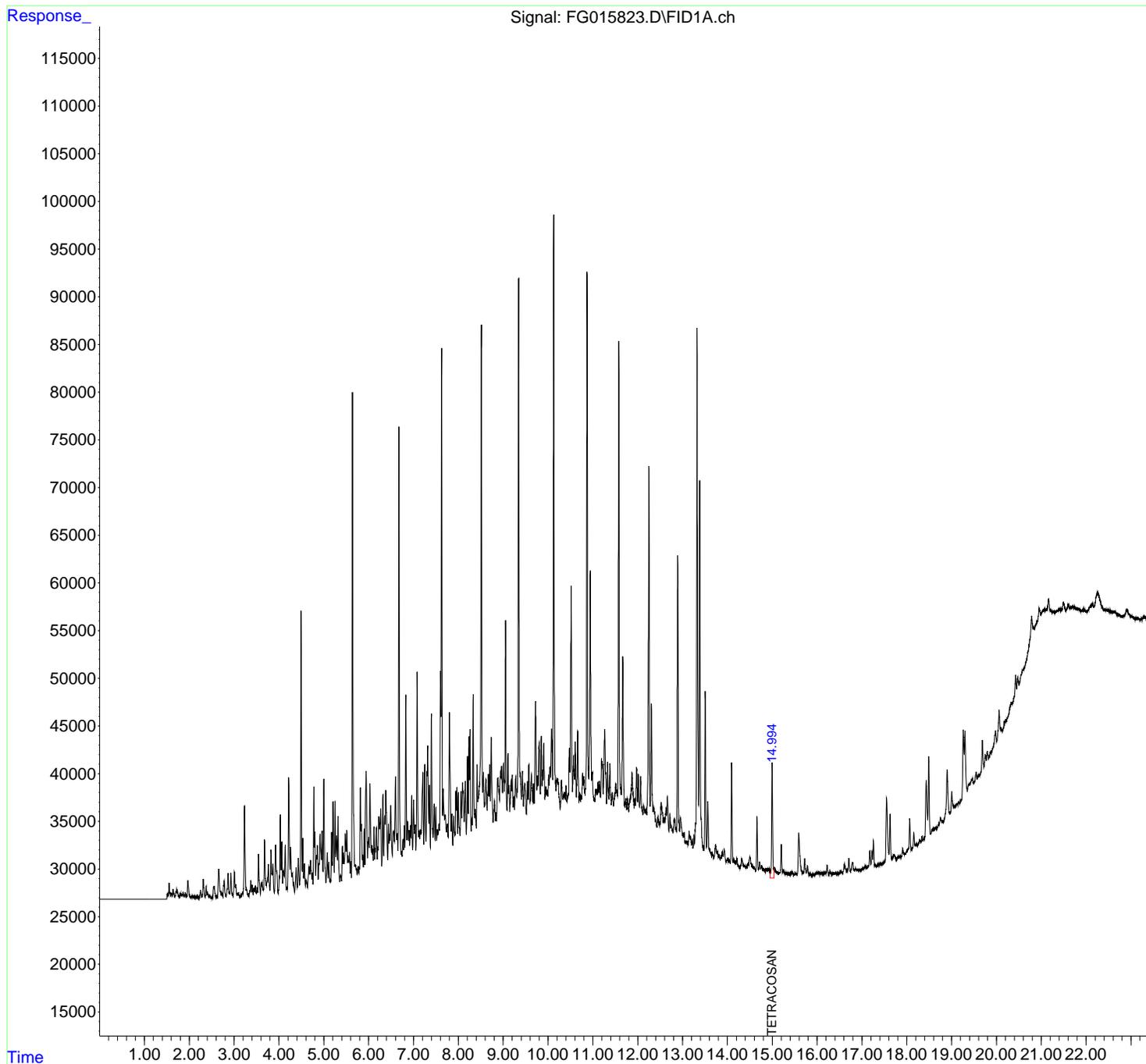
Instrument :  
FID\_G  
ClientSampleId :  
HW0425-PT-DIES-SOIL

Manual Integrations  
APPROVED

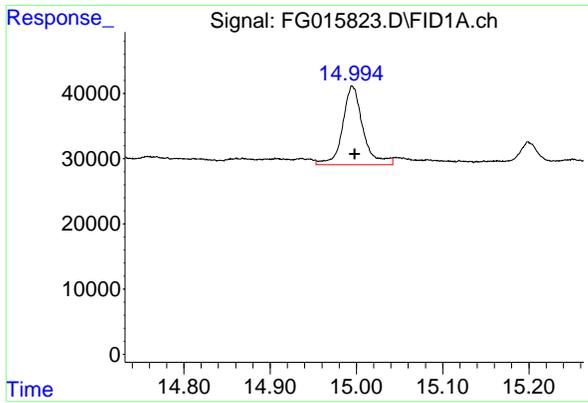
Reviewed By :Yogesh Patel 05/14/2025  
Supervised By :mohammad ahmed 05/15/2025

Integration File: autoint1.e  
Quant Time: May 14 03:55:16 2025  
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
Quant Title :  
QLast Update : Thu Apr 24 12:54:09 2025  
Response via : Initial Calibration  
Integrator: ChemStation

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



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#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 14.994 min  
 Delta R.T.: -0.004 min  
 Response: 198280  
 Conc: 1.68 ug/ml

Instrument :

FID\_G

Client SampleId :

HW0425-PT-DIES-SOIL

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 05/14/2025

Supervised By :mohammad ahmed 05/15/2025

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nteres

Instrument :  
FID\_G  
ClientSampleId :  
HW0425-PT-DIES-SOIL

Area Percent Report

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 05/14/2025  
Supervised By :mohammad ahmed 05/15/2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG05132  
Data File : FG015823.D  
Signal (s) : FID1A.ch  
Acq On : 13 May 2025 15:25  
Sample : Q1872-14 5X  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
Title :

Signal : FID1A.ch

| peak # | R. T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|--------|-----------|-----------|---------|-------|-------------|-----------|-------------|------------|
| 1      | 3.823     | 3.800     | 3.841   | BV    | 4192        | 53225     | 4.40%       | 0.086%     |
| 2      | 3.848     | 3.841     | 3.853   | VV    | 1736        | 11813     | 0.98%       | 0.019%     |
| 3      | 3.866     | 3.853     | 3.897   | VV    | 2720        | 30570     | 2.52%       | 0.049%     |
| 4      | 3.925     | 3.897     | 3.945   | PH    | 4732        | 67177     | 5.55%       | 0.108%     |
| 5      | 3.952     | 3.945     | 3.979   | HH    | 2069        | 20776     | 1.72%       | 0.034%     |
| 6      | 4.030     | 3.979     | 4.048   | PH    | 7921        | 101917    | 8.42%       | 0.164%     |
| 7      | 4.063     | 4.048     | 4.084   | HH    | 5061        | 64124     | 5.30%       | 0.103%     |
| 8      | 4.100     | 4.084     | 4.120   | HH    | 2020        | 34192     | 2.82%       | 0.055%     |
| 9      | 4.140     | 4.120     | 4.162   | HH    | 4728        | 62718     | 5.18%       | 0.101%     |
| 10     | 4.174     | 4.162     | 4.189   | HH    | 278         | 3021      | 0.25%       | 0.005%     |
| 11     | 4.218     | 4.189     | 4.246   | HH    | 11764       | 184450    | 15.23%      | 0.298%     |
| 12     | 4.261     | 4.246     | 4.290   | HH    | 4467        | 71926     | 5.94%       | 0.116%     |
| 13     | 4.300     | 4.290     | 4.318   | HH    | 1754        | 22396     | 1.85%       | 0.036%     |
| 14     | 4.328     | 4.318     | 4.349   | HH    | 787         | 6306      | 0.52%       | 0.010%     |
| 15     | 4.382     | 4.349     | 4.410   | PH    | 2337        | 33233     | 2.74%       | 0.054%     |
| 16     | 4.432     | 4.410     | 4.458   | HH    | 3366        | 47563     | 3.93%       | 0.077%     |
| 17     | 4.494     | 4.458     | 4.517   | HH    | 29282       | 342843    | 28.31%      | 0.553%     |
| 18     | 4.532     | 4.517     | 4.550   | HH    | 5373        | 65772     | 5.43%       | 0.106%     |
| 19     | 4.568     | 4.550     | 4.590   | HH    | 2781        | 40158     | 3.32%       | 0.065%     |
| 20     | 4.606     | 4.590     | 4.634   | HH    | 1041        | 19747     | 1.63%       | 0.032%     |
| 21     | 4.670     | 4.634     | 4.688   | HH    | 2436        | 51357     | 4.24%       | 0.083%     |
| 22     | 4.704     | 4.688     | 4.735   | HH    | 3087        | 60165     | 4.97%       | 0.097%     |
| 23     | 4.746     | 4.735     | 4.759   | HH    | 1822        | 20880     | 1.72%       | 0.034%     |
| 24     | 4.780     | 4.759     | 4.793   | HH    | 10847       | 116772    | 9.64%       | 0.188%     |
| 25     | 4.801     | 4.793     | 4.819   | HH    | 6103        | 64544     | 5.33%       | 0.104%     |
| 26     | 4.837     | 4.819     | 4.848   | HH    | 3669        | 51092     | 4.22%       | 0.082%     |
| 27     | 4.858     | 4.848     | 4.875   | HH    | 4698        | 53291     | 4.40%       | 0.086%     |
| 28     | 4.916     | 4.875     | 4.945   | HH    | 5898        | 146964    | 12.14%      | 0.237%     |
| 29     | 4.960     | 4.945     | 4.982   | HH    | 6186        | 91960     | 7.59%       | 0.148%     |
| 30     | 5.001     | 4.982     | 5.046   | HH    | 11618       | 183668    | 15.17%      | 0.296%     |
| 31     | 5.078     | 5.046     | 5.095   | HH    | 3937        | 64136     | 5.30%       | 0.103%     |
| 32     | 5.111     | 5.095     | 5.140   | HH    | 2910        | 47519     | 3.92%       | 0.077%     |
| 33     | 5.175     | 5.140     | 5.189   | HH    | 6066        | 82016     | 6.77%       | 0.132%     |
| 34     | 5.207     | 5.189     | 5.234   | HH    | 9136        | 144934    | 11.97%      | 0.234%     |
| 35     | 5.251     | 5.234     | 5.267   | HH    | 9252        | 114232    | 9.43%       | 0.184%     |
| 36     | 5.286     | 5.267     | 5.304   | HH    | 5667        | 98169     | 8.11%       | 0.158%     |

|    | nteres |        |        |    |       |        |         |         |
|----|--------|--------|--------|----|-------|--------|---------|---------|
| 37 | 5. 318 | 5. 304 | 5. 353 | HH | 7748  | 114466 | 9. 45%  | 0. 185% |
| 38 | 5. 369 | 5. 353 | 5. 394 | HH | 1532  | 31623  |         |         |
| 39 | 5. 415 | 5. 394 | 5. 430 | HH | 4575  | 63844  |         |         |
| 40 | 5. 440 | 5. 430 | 5. 455 | HH | 3910  | 49072  |         |         |
| 41 | 5. 479 | 5. 455 | 5. 501 | HH | 5908  | 122422 | 10. 00% | 0. 100% |
| 42 | 5. 514 | 5. 501 | 5. 530 | HH | 6230  | 81196  |         |         |
| 43 | 5. 538 | 5. 530 | 5. 562 | HH | 3607  | 62232  | 5. 14%  | 0. 100% |
| 44 | 5. 577 | 5. 562 | 5. 592 | HH | 3961  | 55275  | 4. 56%  | 0. 089% |
| 45 | 5. 604 | 5. 592 | 5. 617 | HH | 3010  | 34022  | 2. 81%  | 0. 055% |
| 46 | 5. 640 | 5. 617 | 5. 691 | HH | 52188 | 738642 | 61. 00% | 1. 191% |
| 47 | 5. 699 | 5. 691 | 5. 743 | HH | 2668  | 72684  | 6. 00%  | 0. 117% |
| 48 | 5. 766 | 5. 743 | 5. 780 | HH | 2493  | 46773  | 3. 86%  | 0. 075% |
| 49 | 5. 791 | 5. 780 | 5. 799 | HH | 2420  | 24524  | 2. 03%  | 0. 040% |
| 50 | 5. 817 | 5. 799 | 5. 833 | HH | 10743 | 141874 | 11. 72% | 0. 229% |
| 51 | 5. 841 | 5. 833 | 5. 859 | HH | 6896  | 85077  | 7. 03%  | 0. 137% |
| 52 | 5. 866 | 5. 859 | 5. 885 | HH | 3671  | 48477  | 4. 00%  | 0. 078% |
| 53 | 5. 903 | 5. 885 | 5. 917 | HH | 6455  | 83200  | 6. 87%  | 0. 134% |
| 54 | 5. 945 | 5. 917 | 5. 978 | HH | 12456 | 287879 | 23. 77% | 0. 464% |
| 55 | 5. 990 | 5. 978 | 5. 995 | HH | 5097  | 46422  | 3. 83%  | 0. 075% |
| 56 | 6. 004 | 5. 995 | 6. 013 | HH | 5564  | 54976  | 4. 54%  | 0. 089% |
| 57 | 6. 030 | 6. 013 | 6. 062 | HH | 11062 | 207346 | 17. 12% | 0. 334% |
| 58 | 6. 072 | 6. 062 | 6. 084 | HH | 4671  | 57848  | 4. 78%  | 0. 093% |
| 59 | 6. 093 | 6. 084 | 6. 106 | HH | 4312  | 49899  | 4. 12%  | 0. 080% |
| 60 | 6. 120 | 6. 106 | 6. 136 | HH | 6636  | 87062  | 7. 19%  | 0. 140% |
| 61 | 6. 148 | 6. 136 | 6. 154 | HH | 4364  | 42772  | 3. 53%  | 0. 069% |
| 62 | 6. 173 | 6. 154 | 6. 191 | HH | 6477  | 112777 | 9. 31%  | 0. 182% |
| 63 | 6. 204 | 6. 191 | 6. 210 | HH | 4516  | 46300  | 3. 82%  | 0. 075% |
| 64 | 6. 227 | 6. 210 | 6. 244 | HH | 7714  | 134559 | 11. 11% | 0. 217% |
| 65 | 6. 272 | 6. 244 | 6. 292 | HH | 8399  | 180435 | 14. 90% | 0. 291% |
| 66 | 6. 319 | 6. 292 | 6. 338 | HH | 10050 | 157532 | 13. 01% | 0. 254% |
| 67 | 6. 359 | 6. 338 | 6. 369 | HH | 7775  | 117785 | 9. 73%  | 0. 190% |
| 68 | 6. 383 | 6. 369 | 6. 428 | HH | 10488 | 258190 | 21. 32% | 0. 416% |
| 69 | 6. 444 | 6. 428 | 6. 456 | HH | 6900  | 91621  | 7. 57%  | 0. 148% |
| 70 | 6. 467 | 6. 456 | 6. 477 | HH | 5894  | 68845  | 5. 69%  | 0. 111% |
| 71 | 6. 493 | 6. 477 | 6. 529 | HH | 8867  | 193506 | 15. 98% | 0. 312% |
| 72 | 6. 548 | 6. 529 | 6. 574 | HH | 6245  | 145446 | 12. 01% | 0. 235% |
| 73 | 6. 600 | 6. 574 | 6. 625 | HH | 11726 | 242519 | 20. 03% | 0. 391% |
| 74 | 6. 640 | 6. 625 | 6. 654 | HH | 5907  | 94070  | 7. 77%  | 0. 152% |
| 75 | 6. 677 | 6. 654 | 6. 724 | HH | 48523 | 677395 | 55. 94% | 1. 093% |
| 76 | 6. 731 | 6. 724 | 6. 747 | HH | 4029  | 53205  | 4. 39%  | 0. 086% |
| 77 | 6. 768 | 6. 747 | 6. 781 | HH | 5343  | 94519  | 7. 81%  | 0. 152% |
| 78 | 6. 797 | 6. 781 | 6. 811 | HH | 6771  | 99730  | 8. 24%  | 0. 161% |
| 79 | 6. 831 | 6. 811 | 6. 854 | HH | 20483 | 294848 | 24. 35% | 0. 476% |
| 80 | 6. 868 | 6. 854 | 6. 892 | HH | 7074  | 146508 | 12. 10% | 0. 236% |
| 81 | 6. 902 | 6. 892 | 6. 917 | HH | 6273  | 82787  | 6. 84%  | 0. 134% |
| 82 | 6. 935 | 6. 917 | 6. 947 | HH | 6788  | 106428 | 8. 79%  | 0. 172% |
| 83 | 6. 961 | 6. 947 | 6. 982 | HH | 9920  | 147755 | 12. 20% | 0. 238% |
| 84 | 7. 003 | 6. 982 | 7. 028 | HH | 9197  | 188606 | 15. 58% | 0. 304% |
| 85 | 7. 039 | 7. 028 | 7. 055 | HH | 6810  | 94166  | 7. 78%  | 0. 152% |
| 86 | 7. 083 | 7. 055 | 7. 116 | HH | 22830 | 390252 | 32. 23% | 0. 629% |
| 87 | 7. 128 | 7. 116 | 7. 142 | HH | 6205  | 91826  | 7. 58%  | 0. 148% |
| 88 | 7. 159 | 7. 142 | 7. 174 | HH | 6343  | 115184 | 9. 51%  | 0. 186% |
| 89 | 7. 209 | 7. 174 | 7. 230 | HH | 12291 | 292333 | 24. 14% | 0. 472% |

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 HW0425-PT-DIES-SOIL

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 Supervised By :mohammad ahmed 05/15/2025

Instrument :  
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 HW0425-PT-DIES-SOIL

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|     | retenes |        |        |    |       |         |          |         |
|-----|---------|--------|--------|----|-------|---------|----------|---------|
| 90  | 7. 252  | 7. 230 | 7. 281 | HH | 13158 | 254072  | 20. 98%  | 0. 410% |
| 91  | 7. 301  | 7. 281 | 7. 306 | HH | 12321 | 137199  |          |         |
| 92  | 7. 318  | 7. 306 | 7. 344 | HH | 15079 | 259660  |          |         |
| 93  | 7. 358  | 7. 344 | 7. 378 | HH | 10975 | 161383  |          |         |
| 94  | 7. 400  | 7. 378 | 7. 437 | HH | 18434 | 351983  |          |         |
| 95  | 7. 463  | 7. 437 | 7. 484 | HH | 9064  | 195187  |          |         |
| 96  | 7. 499  | 7. 484 | 7. 517 | HH | 8685  | 136115  | 11. 24%  | 0. 220% |
| 97  | 7. 529  | 7. 517 | 7. 541 | HH | 6285  | 87612   | 7. 24%   | 0. 141% |
| 98  | 7. 568  | 7. 541 | 7. 579 | HH | 6923  | 145084  | 11. 98%  | 0. 234% |
| 99  | 7. 604  | 7. 579 | 7. 612 | HH | 22881 | 287001  | 23. 70%  | 0. 463% |
| 100 | 7. 628  | 7. 612 | 7. 651 | HH | 56375 | 708684  | 58. 53%  | 1. 143% |
| 101 | 7. 664  | 7. 651 | 7. 691 | HH | 10596 | 216238  | 17. 86%  | 0. 349% |
| 102 | 7. 701  | 7. 691 | 7. 708 | HH | 7847  | 76449   | 6. 31%   | 0. 123% |
| 103 | 7. 713  | 7. 708 | 7. 734 | HH | 7832  | 109830  | 9. 07%   | 0. 177% |
| 104 | 7. 750  | 7. 734 | 7. 776 | HH | 6914  | 157331  | 12. 99%  | 0. 254% |
| 105 | 7. 802  | 7. 776 | 7. 838 | HH | 18627 | 416252  | 34. 38%  | 0. 671% |
| 106 | 7. 854  | 7. 838 | 7. 879 | HH | 7993  | 161020  | 13. 30%  | 0. 260% |
| 107 | 7. 896  | 7. 879 | 7. 924 | HH | 7735  | 170648  | 14. 09%  | 0. 275% |
| 108 | 7. 944  | 7. 924 | 7. 956 | HH | 10371 | 155940  | 12. 88%  | 0. 252% |
| 109 | 7. 968  | 7. 956 | 7. 986 | HH | 10805 | 155345  | 12. 83%  | 0. 251% |
| 110 | 8. 000  | 7. 986 | 8. 037 | HH | 10172 | 226903  | 18. 74%  | 0. 366% |
| 111 | 8. 060  | 8. 037 | 8. 076 | HH | 10292 | 191782  | 15. 84%  | 0. 309% |
| 112 | 8. 094  | 8. 076 | 8. 129 | HH | 11185 | 302087  | 24. 95%  | 0. 487% |
| 113 | 8. 157  | 8. 129 | 8. 178 | HH | 11425 | 256699  | 21. 20%  | 0. 414% |
| 114 | 8. 205  | 8. 178 | 8. 222 | HH | 13892 | 256655  | 21. 20%  | 0. 414% |
| 115 | 8. 239  | 8. 222 | 8. 250 | HH | 15942 | 214921  | 17. 75%  | 0. 347% |
| 116 | 8. 262  | 8. 250 | 8. 287 | HH | 16862 | 254449  | 21. 01%  | 0. 410% |
| 117 | 8. 299  | 8. 287 | 8. 311 | HH | 7410  | 101232  | 8. 36%   | 0. 163% |
| 118 | 8. 332  | 8. 311 | 8. 364 | HH | 20462 | 381714  | 31. 52%  | 0. 616% |
| 119 | 8. 380  | 8. 364 | 8. 402 | HH | 8408  | 172257  | 14. 23%  | 0. 278% |
| 120 | 8. 419  | 8. 402 | 8. 435 | HH | 13026 | 202542  | 16. 73%  | 0. 327% |
| 121 | 8. 514  | 8. 435 | 8. 543 | HH | 59154 | 1210855 | 100. 00% | 1. 953% |
| 122 | 8. 561  | 8. 543 | 8. 578 | HH | 12319 | 232174  | 19. 17%  | 0. 375% |
| 123 | 8. 616  | 8. 578 | 8. 643 | HH | 11625 | 378284  | 31. 24%  | 0. 610% |
| 124 | 8. 673  | 8. 643 | 8. 687 | HH | 12074 | 277980  | 22. 96%  | 0. 448% |
| 125 | 8. 699  | 8. 687 | 8. 714 | HH | 13166 | 184783  | 15. 26%  | 0. 298% |
| 126 | 8. 735  | 8. 714 | 8. 774 | HH | 15932 | 402451  | 33. 24%  | 0. 649% |
| 127 | 8. 806  | 8. 774 | 8. 829 | HH | 9241  | 269059  | 22. 22%  | 0. 434% |
| 128 | 8. 843  | 8. 829 | 8. 855 | HH | 8117  | 120061  | 9. 92%   | 0. 194% |
| 129 | 8. 873  | 8. 855 | 8. 880 | HH | 11673 | 151421  | 12. 51%  | 0. 244% |
| 130 | 8. 889  | 8. 880 | 8. 901 | HH | 11695 | 140950  | 11. 64%  | 0. 227% |
| 131 | 8. 908  | 8. 901 | 8. 919 | HH | 10622 | 105835  | 8. 74%   | 0. 171% |
| 132 | 8. 942  | 8. 919 | 8. 951 | HH | 12410 | 222809  | 18. 40%  | 0. 359% |
| 133 | 8. 964  | 8. 951 | 8. 987 | HH | 12970 | 255338  | 21. 09%  | 0. 412% |
| 134 | 9. 007  | 8. 987 | 9. 023 | HH | 13240 | 252482  | 20. 85%  | 0. 407% |
| 135 | 9. 056  | 9. 023 | 9. 085 | HH | 28207 | 564644  | 46. 63%  | 0. 911% |
| 136 | 9. 109  | 9. 085 | 9. 123 | HH | 14331 | 254583  | 21. 03%  | 0. 411% |
| 137 | 9. 132  | 9. 123 | 9. 149 | HH | 10843 | 158494  | 13. 09%  | 0. 256% |
| 138 | 9. 179  | 9. 149 | 9. 191 | HH | 11531 | 256812  | 21. 21%  | 0. 414% |
| 139 | 9. 204  | 9. 191 | 9. 226 | HH | 11999 | 221403  | 18. 28%  | 0. 357% |
| 140 | 9. 240  | 9. 226 | 9. 255 | HH | 9795  | 159683  | 13. 19%  | 0. 258% |
| 141 | 9. 285  | 9. 255 | 9. 300 | HH | 11923 | 287417  | 23. 74%  | 0. 464% |

|     |        |        |        |    |       |         |        |        |  | Instrument :<br>FID_G                    |  |
|-----|--------|--------|--------|----|-------|---------|--------|--------|--|--|--|
|     |        |        |        |    |       |         |        |        |  | ClientSampleId :<br>HW0425-PT-DIES-SOIL  |  |
|     |        |        |        |    |       |         |        |        |  | Manual IntegrationsAPPROVED              |  |
|     |        |        |        |    |       |         |        |        |  | Reviewed By :Yogesh Patel 05/14/2025     |  |
|     |        |        |        |    |       |         |        |        |  | Supervised By :mohammad ahmed 05/15/2025 |  |
| 142 | 9.344  | 9.300  | 9.375  | HH | 64079 | 1070272 | 88.39% | 1.726% |  |  |  |
| 143 | 9.381  | 9.375  | 9.409  | HH | 12310 | 226122  | 18.40% | 0.555% |  |  |  |
| 144 | 9.430  | 9.409  | 9.454  | HH | 12400 | 293230  | 24.46% | 0.282% |  |  |  |
| 145 | 9.485  | 9.454  | 9.516  | HH | 11048 | 362602  | 29.86% | 0.114% |  |  |  |
| 146 | 9.543  | 9.516  | 9.558  | HH | 11368 | 249434  | 20.67% | 0.404% |  |  |  |
| 147 | 9.574  | 9.558  | 9.596  | HH | 13084 | 255041  | 21.44% | 0.243% |  |  |  |
| 148 | 9.604  | 9.596  | 9.609  | HH | 9573  | 70955   | 5.86%  | 0.114% |  |  |  |
| 149 | 9.630  | 9.609  | 9.663  | HH | 12122 | 343894  | 28.40% | 0.555% |  |  |  |
| 150 | 9.678  | 9.663  | 9.691  | HH | 11124 | 175089  | 14.46% | 0.282% |  |  |  |
| 151 | 9.722  | 9.691  | 9.754  | HH | 19745 | 507687  | 41.93% | 0.819% |  |  |  |
| 152 | 9.765  | 9.754  | 9.778  | HH | 12007 | 163855  | 13.53% | 0.264% |  |  |  |
| 153 | 9.805  | 9.778  | 9.830  | HH | 15490 | 403037  | 33.29% | 0.650% |  |  |  |
| 154 | 9.853  | 9.830  | 9.871  | HH | 16129 | 319158  | 26.36% | 0.515% |  |  |  |
| 155 | 9.884  | 9.871  | 9.892  | HH | 12523 | 149391  | 12.34% | 0.241% |  |  |  |
| 156 | 9.907  | 9.892  | 9.930  | HH | 15394 | 285767  | 23.60% | 0.461% |  |  |  |
| 157 | 9.954  | 9.930  | 9.971  | HH | 10872 | 250299  | 20.67% | 0.404% |  |  |  |
| 158 | 9.981  | 9.971  | 9.995  | HH | 10504 | 150641  | 12.44% | 0.243% |  |  |  |
| 159 | 10.014 | 9.995  | 10.024 | HH | 11993 | 194053  | 16.03% | 0.313% |  |  |  |
| 160 | 10.046 | 10.024 | 10.062 | HH | 12921 | 274025  | 22.63% | 0.442% |  |  |  |
| 161 | 10.081 | 10.062 | 10.106 | HH | 16831 | 377515  | 31.18% | 0.609% |  |  |  |
| 162 | 10.128 | 10.106 | 10.177 | HH | 70353 | 1136507 | 93.86% | 1.833% |  |  |  |
| 163 | 10.206 | 10.177 | 10.218 | HH | 11726 | 275440  | 22.75% | 0.444% |  |  |  |
| 164 | 10.222 | 10.218 | 10.273 | HH | 11662 | 332240  | 27.44% | 0.536% |  |  |  |
| 165 | 10.300 | 10.273 | 10.338 | HH | 11521 | 392579  | 32.42% | 0.633% |  |  |  |
| 166 | 10.341 | 10.338 | 10.349 | HH | 9814  | 63534   | 5.25%  | 0.102% |  |  |  |
| 167 | 10.361 | 10.349 | 10.387 | HH | 10291 | 227360  | 18.78% | 0.367% |  |  |  |
| 168 | 10.403 | 10.387 | 10.422 | HH | 10947 | 212296  | 17.53% | 0.342% |  |  |  |
| 169 | 10.476 | 10.422 | 10.491 | HH | 14884 | 473269  | 39.09% | 0.763% |  |  |  |
| 170 | 10.518 | 10.491 | 10.546 | HH | 31930 | 662908  | 54.75% | 1.069% |  |  |  |
| 171 | 10.570 | 10.546 | 10.592 | HH | 14067 | 340164  | 28.09% | 0.549% |  |  |  |
| 172 | 10.608 | 10.592 | 10.632 | HH | 15533 | 303752  | 25.09% | 0.490% |  |  |  |
| 173 | 10.664 | 10.632 | 10.689 | HH | 16652 | 431458  | 35.63% | 0.696% |  |  |  |
| 174 | 10.706 | 10.689 | 10.726 | HH | 10228 | 214797  | 17.74% | 0.346% |  |  |  |
| 175 | 10.735 | 10.726 | 10.740 | HH | 9694  | 81690   | 6.75%  | 0.132% |  |  |  |
| 176 | 10.770 | 10.740 | 10.791 | HH | 12276 | 328832  | 27.16% | 0.530% |  |  |  |
| 177 | 10.798 | 10.791 | 10.824 | HH | 11931 | 220090  | 18.18% | 0.355% |  |  |  |
| 178 | 10.870 | 10.824 | 10.909 | HH | 63990 | 1197136 | 98.87% | 1.931% |  |  |  |
| 179 | 10.942 | 10.909 | 10.971 | HH | 33356 | 730942  | 60.37% | 1.179% |  |  |  |
| 180 | 10.988 | 10.971 | 11.044 | HH | 12317 | 462930  | 38.23% | 0.747% |  |  |  |
| 181 | 11.067 | 11.044 | 11.094 | HH | 10579 | 309494  | 25.56% | 0.499% |  |  |  |
| 182 | 11.113 | 11.094 | 11.128 | HH | 11331 | 212892  | 17.58% | 0.343% |  |  |  |
| 183 | 11.151 | 11.128 | 11.169 | HH | 11073 | 259772  | 21.45% | 0.419% |  |  |  |
| 184 | 11.194 | 11.169 | 11.231 | HH | 13816 | 453948  | 37.49% | 0.732% |  |  |  |
| 185 | 11.263 | 11.231 | 11.305 | HH | 16821 | 571115  | 47.17% | 0.921% |  |  |  |
| 186 | 11.325 | 11.305 | 11.361 | HH | 13369 | 365194  | 30.16% | 0.589% |  |  |  |
| 187 | 11.379 | 11.361 | 11.417 | HH | 13217 | 357577  | 29.53% | 0.577% |  |  |  |
| 188 | 11.432 | 11.417 | 11.457 | HH | 10131 | 230643  | 19.05% | 0.372% |  |  |  |
| 189 | 11.462 | 11.457 | 11.466 | HH | 9004  | 49305   | 4.07%  | 0.080% |  |  |  |
| 190 | 11.510 | 11.466 | 11.547 | HH | 11054 | 491224  | 40.57% | 0.792% |  |  |  |
| 191 | 11.576 | 11.547 | 11.635 | HH | 57169 | 1094422 | 90.38% | 1.765% |  |  |  |
| 192 | 11.666 | 11.635 | 11.714 | HH | 24431 | 659036  | 54.43% | 1.063% |  |  |  |
| 193 | 11.732 | 11.714 | 11.749 | HH | 9565  | 187367  | 15.47% | 0.302% |  |  |  |
| 194 | 11.753 | 11.749 | 11.759 | HH | 8699  | 51220   | 4.23%  | 0.083% |  |  |  |

|     |        |        |        |    |       | Instrument :        |               |
|-----|--------|--------|--------|----|-------|---------------------|---------------|
|     |        |        |        |    |       | FID_G               |               |
|     |        |        |        |    |       | ClientSampleId :    |               |
|     |        |        |        |    |       | HW0425-PT-DIES-SOIL |               |
| 195 | 11.770 | 11.759 | 11.797 | HH | 9580  | 208133              | 17.19% 0.336% |
| 196 | 11.872 | 11.797 | 11.919 | HH | 12213 | 732802              | 60.00%        |
| 197 | 11.930 | 11.919 | 11.948 | HH | 9628  | 157417              | 13.00%        |
| 198 | 11.971 | 11.948 | 11.994 | HH | 12825 | 302542              | 24.00%        |
| 199 | 12.012 | 11.994 | 12.039 | HH | 12064 | 275996              | 22.00%        |
| 200 | 12.063 | 12.039 | 12.115 | HH | 11762 | 424762              | 35.00%        |
| 201 | 12.132 | 12.115 | 12.158 | HH | 8890  | 220401              | 18.20% 0.356% |
| 202 | 12.164 | 12.158 | 12.170 | HH | 8263  | 57886               | 4.78% 0.093%  |
| 203 | 12.184 | 12.170 | 12.202 | HH | 8444  | 154411              | 12.75% 0.249% |
| 204 | 12.249 | 12.202 | 12.277 | HH | 44412 | 857588              | 70.83% 1.383% |
| 205 | 12.302 | 12.277 | 12.341 | HH | 19522 | 468560              | 38.70% 0.756% |
| 206 | 12.350 | 12.341 | 12.427 | HH | 8660  | 397294              | 32.81% 0.641% |
| 207 | 12.450 | 12.427 | 12.474 | HH | 7649  | 208446              | 17.21% 0.336% |
| 208 | 12.477 | 12.474 | 12.493 | HH | 7159  | 76286               | 6.30% 0.123%  |
| 209 | 12.524 | 12.493 | 12.577 | HH | 9230  | 404121              | 33.37% 0.652% |
| 210 | 12.590 | 12.577 | 12.599 | HH | 7536  | 95917               | 7.92% 0.155%  |
| 211 | 12.631 | 12.599 | 12.646 | HH | 8543  | 222821              | 18.40% 0.359% |
| 212 | 12.661 | 12.646 | 12.695 | HH | 9731  | 233517              | 19.29% 0.377% |
| 213 | 12.716 | 12.695 | 12.731 | HH | 7944  | 155524              | 12.84% 0.251% |
| 214 | 12.742 | 12.731 | 12.749 | HH | 6784  | 73165               | 6.04% 0.118%  |
| 215 | 12.752 | 12.749 | 12.776 | HH | 6663  | 102345              | 8.45% 0.165%  |
| 216 | 12.778 | 12.776 | 12.787 | HH | 6432  | 40338               | 3.33% 0.065%  |
| 217 | 12.816 | 12.787 | 12.852 | HH | 7490  | 265895              | 21.96% 0.429% |
| 218 | 12.855 | 12.852 | 12.860 | HH | 6413  | 30475               | 2.52% 0.049%  |
| 219 | 12.892 | 12.860 | 12.934 | HH | 35082 | 627969              | 51.86% 1.013% |
| 220 | 12.951 | 12.934 | 13.004 | HH | 7439  | 274834              | 22.70% 0.443% |
| 221 | 13.011 | 13.004 | 13.023 | HH | 5932  | 65724               | 5.43% 0.106%  |
| 222 | 13.035 | 13.023 | 13.056 | HH | 5976  | 113039              | 9.34% 0.182%  |
| 223 | 13.060 | 13.056 | 13.069 | HH | 5039  | 39554               | 3.27% 0.064%  |
| 224 | 13.075 | 13.069 | 13.081 | HH | 5021  | 34478               | 2.85% 0.056%  |
| 225 | 13.085 | 13.081 | 13.094 | HH | 5185  | 40419               | 3.34% 0.065%  |
| 226 | 13.100 | 13.094 | 13.104 | HH | 5019  | 27421               | 2.26% 0.044%  |
| 227 | 13.107 | 13.104 | 13.125 | HH | 5174  | 62794               | 5.19% 0.101%  |
| 228 | 13.145 | 13.125 | 13.167 | HH | 5999  | 141238              | 11.66% 0.228% |
| 229 | 13.171 | 13.167 | 13.174 | HH | 5540  | 25019               | 2.07% 0.040%  |
| 230 | 13.183 | 13.174 | 13.200 | HH | 5598  | 78185               | 6.46% 0.126%  |
| 231 | 13.218 | 13.200 | 13.234 | HH | 5199  | 100378              | 8.29% 0.162%  |
| 232 | 13.254 | 13.234 | 13.269 | HH | 5699  | 107290              | 8.86% 0.173%  |
| 233 | 13.323 | 13.269 | 13.359 | HH | 58714 | 1075860             | 88.85% 1.735% |
| 234 | 13.380 | 13.359 | 13.473 | HH | 42865 | 852818              | 70.43% 1.376% |
| 235 | 13.505 | 13.473 | 13.533 | HH | 20817 | 356748              | 29.46% 0.575% |
| 236 | 13.561 | 13.533 | 13.603 | HH | 9276  | 249859              | 20.63% 0.403% |
| 237 | 13.606 | 13.603 | 13.636 | HH | 4284  | 79339               | 6.55% 0.128%  |
| 238 | 13.640 | 13.636 | 13.649 | HH | 3843  | 29726               | 2.45% 0.048%  |
| 239 | 13.651 | 13.649 | 13.704 | HH | 3932  | 117328              | 9.69% 0.189%  |
| 240 | 13.737 | 13.704 | 13.765 | HH | 4800  | 153218              | 12.65% 0.247% |
| 241 | 13.771 | 13.765 | 13.776 | HH | 3984  | 24884               | 2.06% 0.040%  |
| 242 | 13.782 | 13.776 | 13.803 | HH | 4004  | 61560               | 5.08% 0.099%  |
| 243 | 13.815 | 13.803 | 13.839 | HH | 3723  | 75211               | 6.21% 0.121%  |
| 244 | 13.857 | 13.839 | 13.869 | HH | 3645  | 62302               | 5.15% 0.100%  |
| 245 | 13.886 | 13.869 | 13.910 | HH | 4061  | 92963               | 7.68% 0.150%  |
| 246 | 13.928 | 13.910 | 13.971 | HH | 4252  | 132931              | 10.98% 0.214% |

Instrument :  
 FID\_G  
 ClientSampleId :  
 HW0425-PT-DIES-SOIL

**Manual Integrations APPROVED**

Reviewed By :Yogesh Patel 05/14/2025  
 Supervised By :mohammad ahmed 05/15/2025

|     |        |        |        |    | rteres |        |        |        |
|-----|--------|--------|--------|----|--------|--------|--------|--------|
| 247 | 13.980 | 13.971 | 13.989 | HH | 3173   | 32462  | 2.68%  | 0.052% |
| 248 | 14.008 | 13.989 | 14.028 | HH | 3367   | 75288  |        |        |
| 249 | 14.045 | 14.028 | 14.065 | HH | 3205   | 67943  |        |        |
| 250 | 14.093 | 14.065 | 14.127 | HH | 13361  | 235116 | 19.68% | 0.352% |
| 251 | 14.149 | 14.127 | 14.167 | HH | 3225   | 72356  | 5.96%  | 0.116% |
| 252 | 14.177 | 14.167 | 14.192 | HH | 3104   | 43785  | 4.75%  | 0.093% |
| 253 | 14.212 | 14.192 | 14.233 | HH | 3313   | 72205  | 1.69%  | 0.033% |
| 254 | 14.238 | 14.233 | 14.271 | HH | 2677   | 57461  |        |        |
| 255 | 14.277 | 14.271 | 14.286 | HH | 2437   | 20504  |        |        |
| 256 | 14.322 | 14.286 | 14.377 | HH | 3239   | 151215 | 12.49% | 0.244% |
| 257 | 14.387 | 14.377 | 14.406 | HH | 2590   | 43640  | 3.60%  | 0.070% |
| 258 | 14.418 | 14.406 | 14.439 | HH | 2502   | 48337  | 3.99%  | 0.078% |
| 259 | 14.459 | 14.439 | 14.473 | HH | 2786   | 52270  | 4.32%  | 0.084% |
| 260 | 14.495 | 14.473 | 14.501 | HH | 3481   | 53986  | 4.46%  | 0.087% |
| 261 | 14.507 | 14.501 | 14.536 | HH | 3428   | 63013  | 5.20%  | 0.102% |
| 262 | 14.554 | 14.536 | 14.578 | HH | 2672   | 62561  | 5.17%  | 0.101% |
| 263 | 14.601 | 14.578 | 14.629 | HH | 2438   | 70003  | 5.78%  | 0.113% |
| 264 | 14.658 | 14.629 | 14.689 | HH | 7727   | 143500 | 11.85% | 0.231% |
| 265 | 14.718 | 14.689 | 14.742 | HH | 2927   | 78704  | 6.50%  | 0.127% |
| 266 | 14.758 | 14.742 | 14.786 | HH | 2547   | 61924  | 5.11%  | 0.100% |
| 267 | 14.792 | 14.786 | 14.807 | HH | 2261   | 27471  | 2.27%  | 0.044% |
| 268 | 14.811 | 14.807 | 14.846 | HH | 2221   | 48290  | 3.99%  | 0.078% |
| 269 | 14.869 | 14.846 | 14.885 | HH | 2243   | 49982  | 4.13%  | 0.081% |
| 270 | 14.888 | 14.885 | 14.901 | HH | 2114   | 20006  | 1.65%  | 0.032% |
| 271 | 14.907 | 14.901 | 14.927 | HH | 2170   | 32964  | 2.72%  | 0.053% |
| 272 | 14.936 | 14.927 | 14.957 | HH | 2218   | 37428  | 3.09%  | 0.060% |
| 273 | 14.995 | 14.957 | 15.033 | HH | 13294  | 249079 | 20.57% | 0.402% |
| 274 | 15.045 | 15.033 | 15.079 | HH | 2337   | 59641  | 4.93%  | 0.096% |
| 275 | 15.082 | 15.079 | 15.115 | HH | 2045   | 41379  | 3.42%  | 0.067% |
| 276 | 15.120 | 15.115 | 15.136 | HH | 1921   | 22325  | 1.84%  | 0.036% |
| 277 | 15.164 | 15.136 | 15.172 | HH | 1879   | 38308  | 3.16%  | 0.062% |
| 278 | 15.199 | 15.172 | 15.235 | HH | 4777   | 105828 | 8.74%  | 0.171% |
| 279 | 15.251 | 15.235 | 15.303 | HH | 2111   | 76257  | 6.30%  | 0.123% |
| 280 | 15.310 | 15.303 | 15.315 | HH | 1761   | 12863  | 1.06%  | 0.021% |
| 281 | 15.320 | 15.315 | 15.326 | HH | 1747   | 11098  | 0.92%  | 0.018% |
| 282 | 15.331 | 15.326 | 15.350 | HH | 1839   | 25370  | 2.10%  | 0.041% |
| 283 | 15.354 | 15.350 | 15.368 | HH | 1759   | 17129  | 1.41%  | 0.028% |
| 284 | 15.376 | 15.368 | 15.387 | HH | 1764   | 19033  | 1.57%  | 0.031% |
| 285 | 15.399 | 15.387 | 15.408 | HH | 1885   | 22509  | 1.86%  | 0.036% |
| 286 | 15.447 | 15.408 | 15.468 | HH | 1937   | 62881  | 5.19%  | 0.101% |
| 287 | 15.473 | 15.468 | 15.489 | HH | 1684   | 21292  | 1.76%  | 0.034% |
| 288 | 15.513 | 15.489 | 15.524 | HH | 1789   | 35440  | 2.93%  | 0.057% |
| 289 | 15.538 | 15.524 | 15.554 | HH | 1793   | 29909  | 2.47%  | 0.048% |
| 290 | 15.588 | 15.554 | 15.693 | HH | 5876   | 246490 | 20.36% | 0.398% |
| 291 | 15.724 | 15.693 | 15.764 | HH | 3305   | 99085  | 8.18%  | 0.160% |
| 292 | 15.784 | 15.764 | 15.818 | HH | 2574   | 66480  | 5.49%  | 0.107% |
| 293 | 15.820 | 15.818 | 15.833 | HH | 1772   | 15408  | 1.27%  | 0.025% |
| 294 | 15.838 | 15.833 | 15.845 | HH | 1704   | 11295  | 0.93%  | 0.018% |
| 295 | 15.851 | 15.845 | 15.865 | HH | 1723   | 20166  | 1.67%  | 0.033% |
| 296 | 15.909 | 15.865 | 15.919 | HH | 1707   | 51470  | 4.25%  | 0.083% |
| 297 | 15.933 | 15.919 | 15.953 | HH | 1710   | 34219  | 2.83%  | 0.055% |
| 298 | 15.960 | 15.953 | 15.969 | HH | 1701   | 14996  | 1.24%  | 0.024% |
| 299 | 15.989 | 15.969 | 16.000 | HH | 1758   | 31931  | 2.64%  | 0.052% |

Instrument :  
 FID\_G  
 ClientSampleId :  
 HW0425-PT-DIES-SOIL

2.68% 0.052%

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 05/14/2025  
 Supervised By :mohammad ahmed 05/15/2025

| Peak No.                | Retention Time (min) | Area   | Height | Width | Integration Method | Area (%) | Height (%)    |
|-------------------------|----------------------|--------|--------|-------|--------------------|----------|---------------|
| 300                     | 16.033               | 16.000 | 16.059 | HH    | 1863               | 63355    | 5.23% 0.102%  |
| 301                     | 16.062               | 16.059 | 16.067 | HH    | 1760               | 8375     |               |
| 302                     | 16.103               | 16.067 | 16.109 | HH    | 1889               | 44436    |               |
| 303                     | 16.112               | 16.109 | 16.144 | HH    | 1874               | 36415    |               |
| 304                     | 16.176               | 16.144 | 16.201 | HH    | 1855               | 59696    |               |
| 305                     | 16.224               | 16.201 | 16.262 | HH    | 2572               | 75491    |               |
| 306                     | 16.289               | 16.262 | 16.337 | HH    | 1984               | 79688    | 6.58% 0.129%  |
| 307                     | 16.365               | 16.337 | 16.381 | HH    | 1839               | 45363    | 3.75% 0.073%  |
| 308                     | 16.413               | 16.381 | 16.432 | HH    | 1908               | 54996    | 4.54% 0.089%  |
| 309                     | 16.447               | 16.432 | 16.467 | HH    | 1772               | 36932    | 3.05% 0.060%  |
| 310                     | 16.540               | 16.467 | 16.562 | HH    | 1887               | 102167   | 8.44% 0.165%  |
| 311                     | 16.608               | 16.562 | 16.659 | HH    | 2696               | 128387   | 10.60% 0.207% |
| 312                     | 16.676               | 16.659 | 16.683 | HH    | 2098               | 29037    | 2.40% 0.047%  |
| 313                     | 16.708               | 16.683 | 16.742 | HH    | 3320               | 89624    | 7.40% 0.145%  |
| 314                     | 16.788               | 16.742 | 16.834 | HH    | 2854               | 130233   | 10.76% 0.210% |
| 315                     | 16.861               | 16.834 | 16.897 | HH    | 2198               | 81403    | 6.72% 0.131%  |
| 316                     | 16.911               | 16.897 | 16.932 | HH    | 2172               | 43357    | 3.58% 0.070%  |
| 317                     | 16.942               | 16.932 | 16.970 | HH    | 2147               | 48606    | 4.01% 0.078%  |
| 318                     | 17.016               | 16.970 | 17.034 | HH    | 2244               | 83382    | 6.89% 0.134%  |
| 319                     | 17.090               | 17.034 | 17.108 | HH    | 2454               | 104355   | 8.62% 0.168%  |
| 320                     | 17.176               | 17.108 | 17.202 | HH    | 4077               | 162904   | 13.45% 0.263% |
| 321                     | 17.224               | 17.202 | 17.237 | HH    | 4085               | 73068    | 6.03% 0.118%  |
| 322                     | 17.256               | 17.237 | 17.328 | HH    | 5176               | 175550   | 14.50% 0.283% |
| 323                     | 17.408               | 17.328 | 17.435 | HH    | 2771               | 169858   | 14.03% 0.274% |
| 324                     | 17.464               | 17.435 | 17.484 | HH    | 2875               | 82391    | 6.80% 0.133%  |
| 325                     | 17.550               | 17.484 | 17.602 | HH    | 9548               | 365700   | 30.20% 0.590% |
| 326                     | 17.628               | 17.602 | 17.676 | HH    | 7853               | 211297   | 17.45% 0.341% |
| 327                     | 17.719               | 17.676 | 17.771 | HH    | 3732               | 197711   | 16.33% 0.319% |
| 328                     | 17.800               | 17.771 | 17.810 | HH    | 3477               | 79136    | 6.54% 0.128%  |
| 329                     | 17.835               | 17.810 | 17.866 | HH    | 3522               | 116847   | 9.65% 0.188%  |
| 330                     | 17.909               | 17.866 | 17.946 | HH    | 4379               | 185023   | 15.28% 0.298% |
| 331                     | 17.954               | 17.946 | 17.971 | HH    | 3824               | 56803    | 4.69% 0.092%  |
| 332                     | 18.066               | 17.971 | 18.099 | HH    | 7376               | 364248   | 30.08% 0.588% |
| 333                     | 18.157               | 18.099 | 18.194 | HH    | 6029               | 275437   | 22.75% 0.444% |
| 334                     | 18.203               | 18.194 | 18.242 | HH    | 4801               | 137712   | 11.37% 0.222% |
| 335                     | 18.289               | 18.242 | 18.312 | HH    | 5158               | 209756   | 17.32% 0.338% |
| 336                     | 18.341               | 18.312 | 18.363 | HH    | 5633               | 161590   | 13.35% 0.261% |
| 337                     | 18.385               | 18.363 | 18.394 | HH    | 5455               | 99898    | 8.25% 0.161%  |
| 338                     | 18.432               | 18.394 | 18.464 | HH    | 11480              | 355572   | 29.37% 0.574% |
| 339                     | 18.489               | 18.464 | 18.501 | HBA   | 7308               | 134924   | 11.14% 0.218% |
| Sum of corrected areas: |                      |        |        |       | 61994094           |          |               |

Instrument :  
 FID\_G  
 ClientSampleId :  
 HW0425-PT-DIES-SOIL  
 5.23% 0.102%

**Manual Integrations APPROVED**

Reviewed By :Yogesh Patel 05/14/2025  
 Supervised By :mohammad ahmed 05/15/2025

FG042425.M Wed May 14 05:33:33 2025



# CALIBRATION SUMMARY

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18

**DIESEL RANGE ORGANICS INITIAL CALIBRATION SUMMARY**

Lab Name: Chemtech Contract: ALLI03  
 ProjectID: NJ Soil PT  
 Lab Code: CHEM Case No.: Q1872 SAS No.: Q1872 SDG No.: Q1872

| Calibration Sequence : FG042425 |            | Test : Diesel Range Organics |            |                         |
|---------------------------------|------------|------------------------------|------------|-------------------------|
| Concentration (PPM)             | Area Count | Reference Factor             | File ID    |                         |
| 1000                            | 122641169  | 122641                       | FG015756.D |                         |
| 500                             | 64139521   | 128279                       | FG015757.D |                         |
| 200                             | 25210755   | 126054                       | FG015758.D |                         |
| 100                             | 13317775   | 133178                       | FG015759.D |                         |
| 50                              | 6223650    | 124473                       | FG015760.D |                         |
| <b>AVG RF : 126925</b>          |            | <b>% RSD : 3.202</b>         |            | <b>AVG RT : 15.0012</b> |



Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG042425\  
 Data File : FG015756.D  
 Signal(s) : FID1A.ch  
 Acq On : 24 Apr 2025 10:48  
 Operator : YP\AJ  
 Sample : 100 TRPH STD  
 Misc :  
 ALS Vial : 71 Sample Multiplier: 1

Instrument :  
 FID\_G  
 ClientSampleId :  
 100 TRPH STD

Integration File: autoint1.e  
 Quant Time: Apr 24 11:27:45 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
 Quant Title :  
 QLast Update : Thu Apr 24 11:24:48 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

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

| Compound                      | R.T.   | Response | Conc Units   |
|-------------------------------|--------|----------|--------------|
| -----                         |        |          |              |
| System Monitoring Compounds   |        |          |              |
| 9) S TETRACOSANE-d50 (SURR... | 15.007 | 11104419 | 97.461 ug/ml |
| Target Compounds              |        |          |              |
| 1) N-OCTANE                   | 1.974  | 10996290 | 98.710 ug/ml |
| 2) N-DECANE                   | 4.505  | 11243230 | 98.740 ug/ml |
| 3) N-DODECANE                 | 6.689  | 11662485 | 98.467 ug/ml |
| 4) N-TETRADECANE              | 8.526  | 11973700 | 97.938 ug/ml |
| 5) N-HEXADECANE               | 10.140 | 12216508 | 97.599 ug/ml |
| 6) N-OCTADECANE               | 11.589 | 12572177 | 97.463 ug/ml |
| 7) N-EICOSANE                 | 12.904 | 12823427 | 97.384 ug/ml |
| 8) N-DOCOSANE                 | 14.106 | 12541120 | 97.443 ug/ml |
| 10) N-TETRACOSANE             | 15.213 | 12584383 | 97.592 ug/ml |
| 11) N-HEXACOSANE              | 16.237 | 12562391 | 97.503 ug/ml |
| 12) N-OCTACOSANE              | 17.189 | 12461748 | 97.586 ug/ml |
| 13) N-TRIACONTANE             | 18.079 | 12549024 | 97.656 ug/ml |
| 14) N-DOTRIACONTANE           | 18.913 | 12168396 | 97.077 ug/ml |
| 15) N-TETRATRIACONTANE        | 19.697 | 10948623 | 96.599 ug/ml |
| 16) N-HEXATRIACONTANE         | 20.437 | 9283927  | 95.058 ug/ml |
| 17) N-OCTATRIACONTANE         | 21.177 | 7985569  | 93.305 ug/ml |
| 18) N-TETRACONTANE            | 22.097 | 7362877  | 94.497 ug/ml |

(f)=RT Delta > 1/2 Window

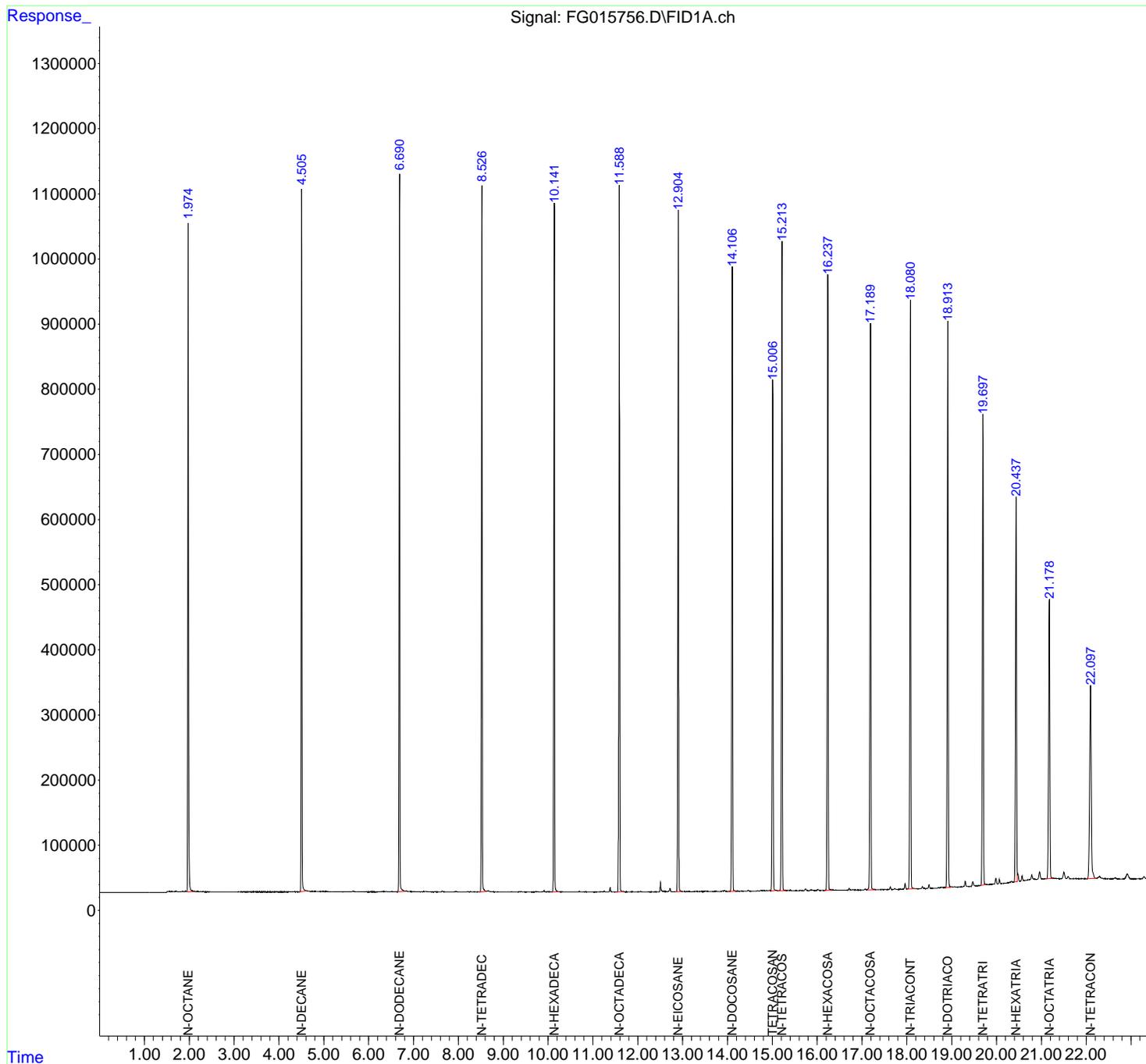
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG042425\  
 Data File : FG015756.D  
 Signal(s) : FID1A.ch  
 Acq On : 24 Apr 2025 10:48  
 Operator : YP\AJ  
 Sample : 100 TRPH STD  
 Misc :  
 ALS Vial : 71 Sample Multiplier: 1

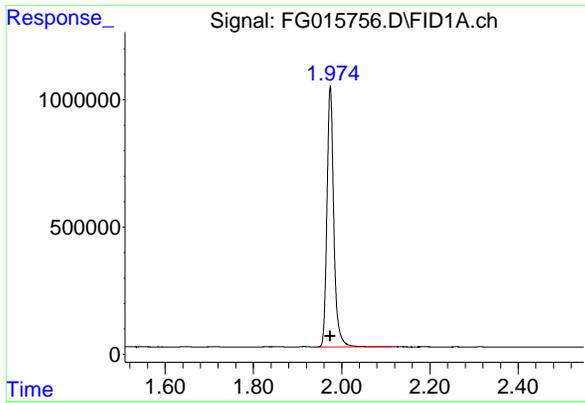
Instrument :  
 FID\_G  
 ClientSampleId :  
 100 TRPH STD

Integration File: autoint1.e  
 Quant Time: Apr 24 11:27:45 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
 Quant Title :  
 QLast Update : Thu Apr 24 11:24:48 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

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



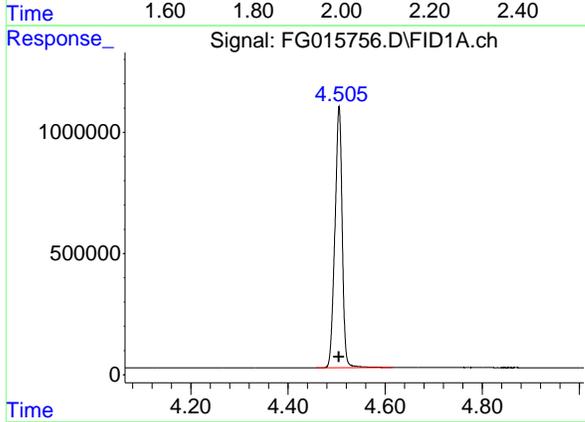
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#1 N-OCTANE

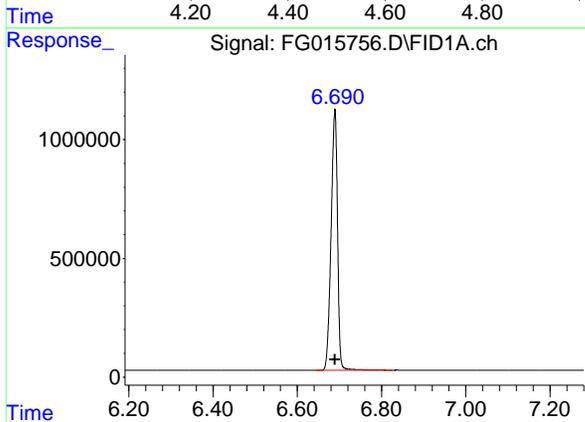
R.T.: 1.974 min  
Delta R.T.: 0.000 min  
Response: 10996290  
Conc: 98.71 ug/ml

Instrument :  
FID\_G  
ClientSampleId :  
100 TRPH STD



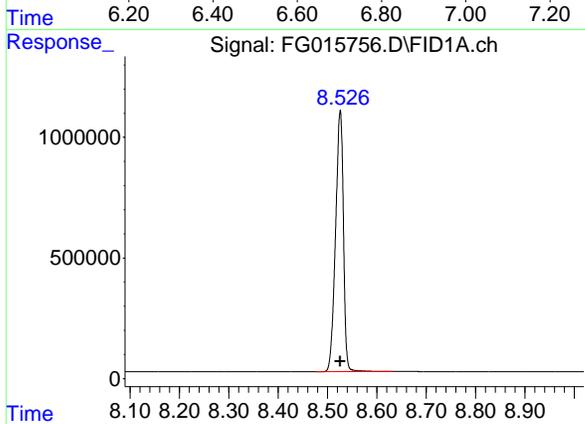
#2 N-DECANE

R.T.: 4.505 min  
Delta R.T.: 0.000 min  
Response: 11243230  
Conc: 98.74 ug/ml



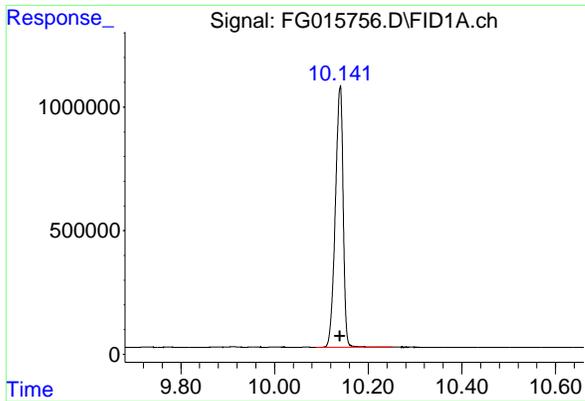
#3 N-DODECANE

R.T.: 6.689 min  
Delta R.T.: 0.000 min  
Response: 11662485  
Conc: 98.47 ug/ml



#4 N-TETRADECANE

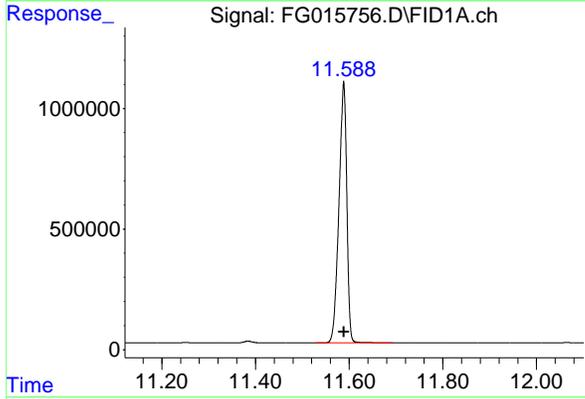
R.T.: 8.526 min  
Delta R.T.: 0.000 min  
Response: 11973700  
Conc: 97.94 ug/ml



#5 N-HEXADECANE

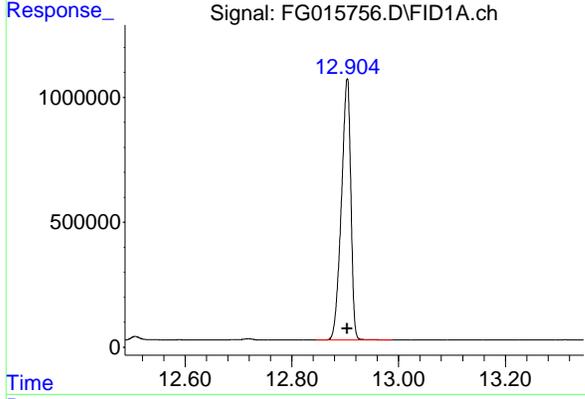
R.T.: 10.140 min  
Delta R.T.: 0.000 min  
Response: 12216508  
Conc: 97.60 ug/ml

Instrument : FID\_G  
Client Sample Id : 100 TRPH STD



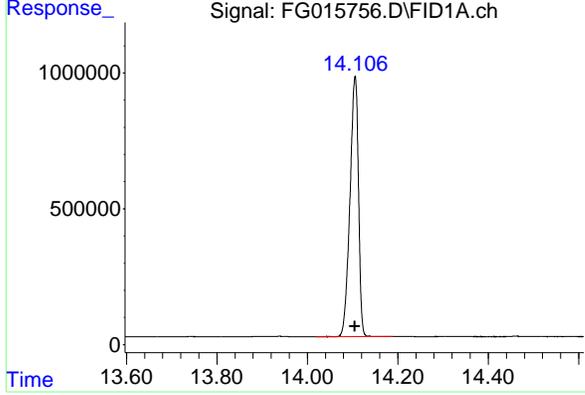
#6 N-OCTADECANE

R.T.: 11.589 min  
Delta R.T.: 0.000 min  
Response: 12572177  
Conc: 97.46 ug/ml



#7 N-EICOSANE

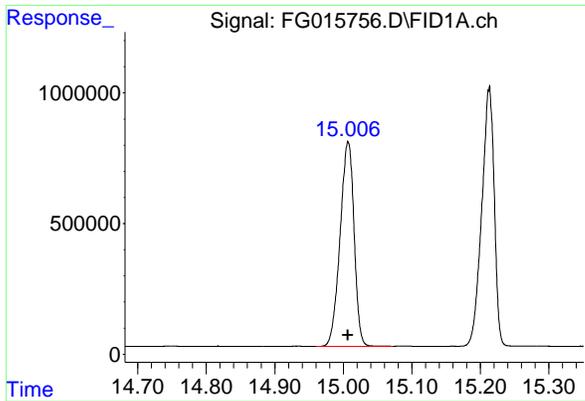
R.T.: 12.904 min  
Delta R.T.: 0.000 min  
Response: 12823427  
Conc: 97.38 ug/ml



#8 N-DOCOSANE

R.T.: 14.106 min  
Delta R.T.: 0.000 min  
Response: 12541120  
Conc: 97.44 ug/ml

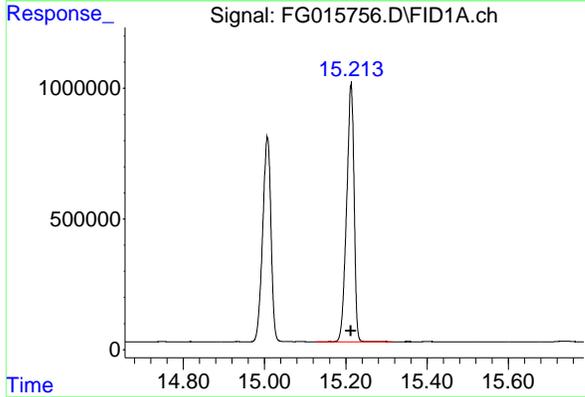
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#9 TETRACOSANE-d50 (SURROGATE)

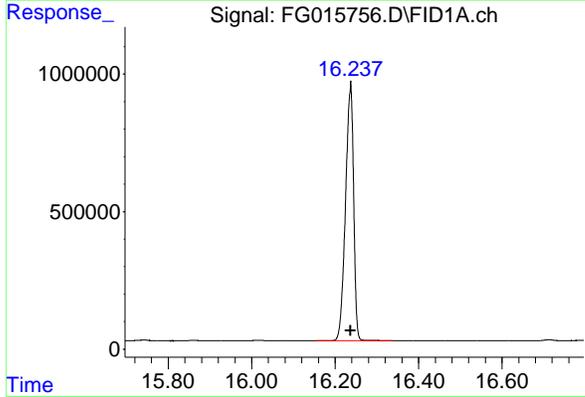
R.T.: 15.007 min  
 Delta R.T.: 0.000 min  
 Response: 11104419  
 Conc: 97.46 ug/ml

Instrument : FID\_G  
 ClientSampleId : 100 TRPH STD



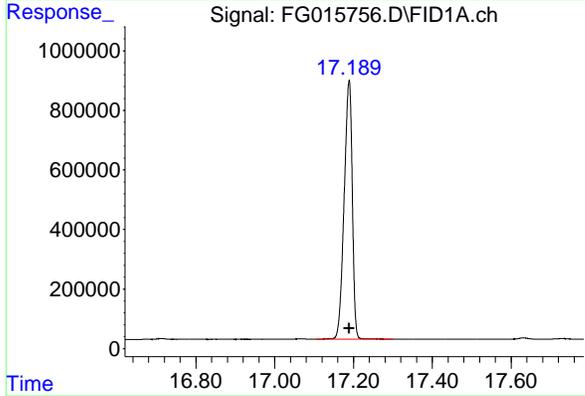
#10 N-TETRACOSANE

R.T.: 15.213 min  
 Delta R.T.: 0.000 min  
 Response: 12584383  
 Conc: 97.59 ug/ml



#11 N-HEXACOSANE

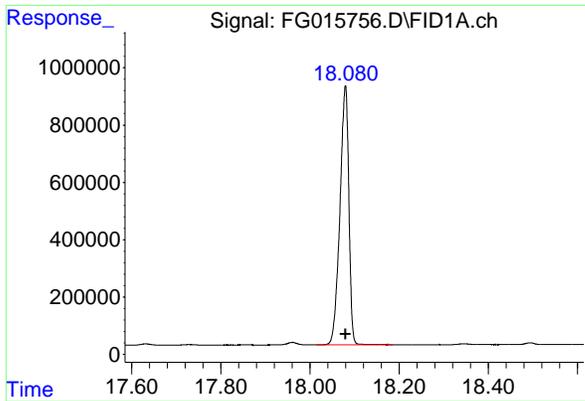
R.T.: 16.237 min  
 Delta R.T.: 0.000 min  
 Response: 12562391  
 Conc: 97.50 ug/ml



#12 N-OCTACOSANE

R.T.: 17.189 min  
 Delta R.T.: 0.000 min  
 Response: 12461748  
 Conc: 97.59 ug/ml

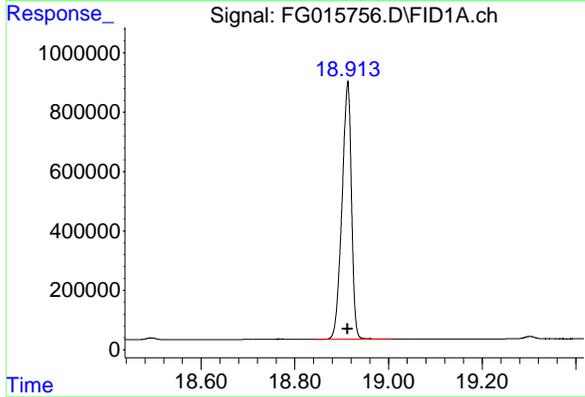
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#13 N-TRIACONTANE

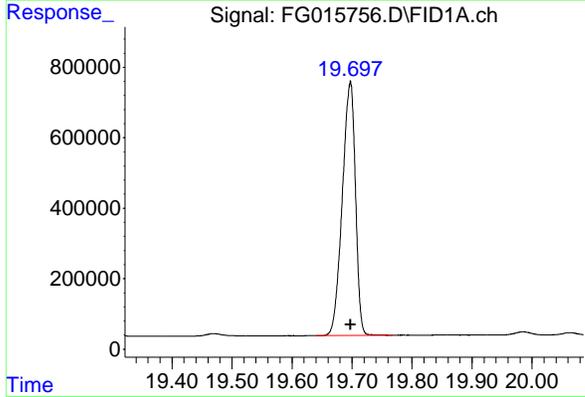
R.T.: 18.079 min  
Delta R.T.: 0.000 min  
Response: 12549024  
Conc: 97.66 ug/ml

Instrument : FID\_G  
ClientSampleId : 100 TRPH STD



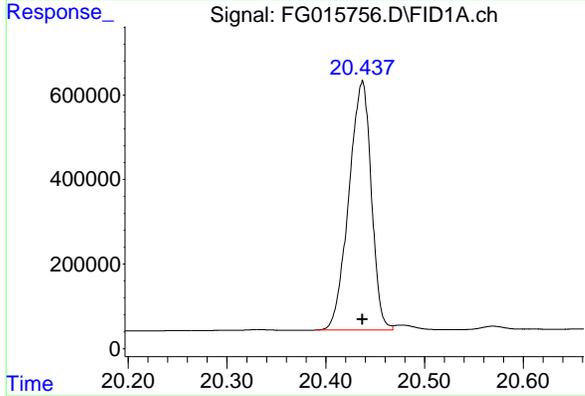
#14 N-DOTRIACONTANE

R.T.: 18.913 min  
Delta R.T.: 0.000 min  
Response: 12168396  
Conc: 97.08 ug/ml



#15 N-TETRATRIACONTANE

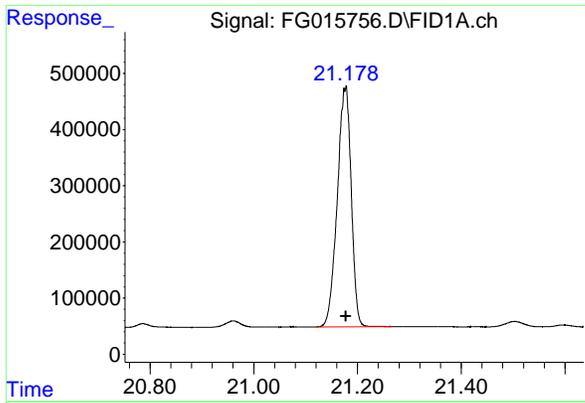
R.T.: 19.697 min  
Delta R.T.: 0.000 min  
Response: 10948623  
Conc: 96.60 ug/ml



#16 N-HEXATRIACONTANE

R.T.: 20.437 min  
Delta R.T.: 0.000 min  
Response: 9283927  
Conc: 95.06 ug/ml

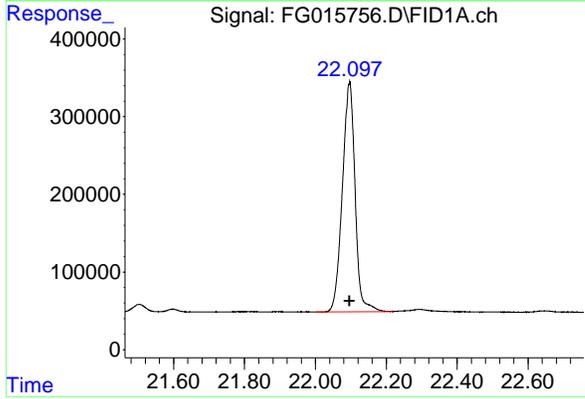
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#17 N-OCTATRIACONTANE

R.T.: 21.177 min  
 Delta R.T.: 0.000 min  
 Response: 7985569  
 Conc: 93.30 ug/ml

Instrument :  
 FID\_G  
 ClientSampleId :  
 100 TRPH STD



#18 N-TETRACONTANE

R.T.: 22.097 min  
 Delta R.T.: 0.000 min  
 Response: 7362877  
 Conc: 94.50 ug/ml

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Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG042425\  
 Data File : FG015756.D  
 Signal(s) : FID1A.ch  
 Acq On : 24 Apr 2025 10:48  
 Sample : 100 TRPH STD  
 Misc :  
 ALS Vial : 71 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
 Title :

Signal : FID1A.ch

| peak #                  | R. T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|-------------------------|-----------|-----------|---------|-------|-------------|-----------|-------------|------------|
| 1                       | 1.974     | 1.942     | 2.115   | PB    | 1024920     | 10996290  | 85.75%      | 5.363%     |
| 2                       | 4.505     | 4.458     | 4.615   | BV    | 1077976     | 11243230  | 87.68%      | 5.483%     |
| 3                       | 6.689     | 6.645     | 6.826   | BV    | 1098911     | 11662485  | 90.95%      | 5.688%     |
| 4                       | 8.526     | 8.477     | 8.632   | BV    | 1084475     | 11973700  | 93.37%      | 5.840%     |
| 5                       | 10.140    | 10.089    | 10.252  | BB    | 1053512     | 12216508  | 95.27%      | 5.958%     |
| 6                       | 11.589    | 11.530    | 11.693  | BB    | 1084929     | 12572177  | 98.04%      | 6.132%     |
| 7                       | 12.904    | 12.845    | 12.989  | BB    | 1045141     | 12823427  | 100.00%     | 6.254%     |
| 8                       | 14.106    | 14.020    | 14.189  | BB    | 958194      | 12541120  | 97.80%      | 6.116%     |
| 9                       | 15.007    | 14.960    | 15.072  | BV    | 782960      | 11104419  | 86.59%      | 5.416%     |
| 10                      | 15.213    | 15.127    | 15.315  | BB    | 983900      | 12584383  | 98.14%      | 6.138%     |
| 11                      | 16.237    | 16.155    | 16.338  | BB    | 936784      | 12562391  | 97.96%      | 6.127%     |
| 12                      | 17.189    | 17.105    | 17.300  | BB    | 869173      | 12461748  | 97.18%      | 6.078%     |
| 13                      | 18.079    | 18.014    | 18.185  | BB    | 903788      | 12549024  | 97.86%      | 6.120%     |
| 14                      | 18.913    | 18.845    | 19.009  | BB    | 864772      | 12168396  | 94.89%      | 5.935%     |
| 15                      | 19.697    | 19.640    | 19.768  | BV    | 722721      | 10948623  | 85.38%      | 5.340%     |
| 16                      | 20.437    | 20.390    | 20.468  | BV    | 587955      | 9283927   | 72.40%      | 4.528%     |
| 17                      | 21.177    | 21.120    | 21.268  | BB    | 425010      | 7985569   | 62.27%      | 3.895%     |
| 18                      | 22.097    | 22.002    | 22.218  | BV    | 294785      | 7362877   | 57.42%      | 3.591%     |
| Sum of corrected areas: |           |           |         |       |             | 205040295 |             |            |

FG042425.M Thu Apr 24 13:16:57 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG042425\  
 Data File : FG015757.D  
 Signal(s) : FID1A.ch  
 Acq On : 24 Apr 2025 11:17  
 Operator : YP\AJ  
 Sample : 50 TRPH STD  
 Misc :  
 ALS Vial : 72 Sample Multiplier: 1

Instrument :  
 FID\_G  
 ClientSampleId :  
 50 TRPH STD

Integration File: autoint1.e  
 Quant Time: Apr 24 11:25:06 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
 Quant Title :  
 QLast Update : Thu Apr 24 11:24:48 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

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

| Compound                      | R.T.   | Response | Conc Units   |
|-------------------------------|--------|----------|--------------|
| -----                         |        |          |              |
| System Monitoring Compounds   |        |          |              |
| 9) S TETRACOSANE-d50 (SURR... | 15.002 | 5841495  | 50.000 ug/ml |
| Target Compounds              |        |          |              |
| 1) N-OCTANE                   | 1.975  | 5641868  | 50.000 ug/ml |
| 2) N-DECANE                   | 4.503  | 5765123  | 50.000 ug/ml |
| 3) N-DODECANE                 | 6.686  | 6012868  | 50.000 ug/ml |
| 4) N-TETRADECANE              | 8.522  | 6238947  | 50.000 ug/ml |
| 5) N-HEXADECANE               | 10.136 | 6408748  | 50.000 ug/ml |
| 6) N-OCTADECANE               | 11.584 | 6613302  | 50.000 ug/ml |
| 7) N-EICOSANE                 | 12.898 | 6756237  | 50.000 ug/ml |
| 8) N-DOCOSANE                 | 14.100 | 6599646  | 50.000 ug/ml |
| 10) N-TETRACOSANE             | 15.207 | 6602706  | 50.000 ug/ml |
| 11) N-HEXACOSANE              | 16.231 | 6602864  | 50.000 ug/ml |
| 12) N-OCTACOSANE              | 17.184 | 6539080  | 50.000 ug/ml |
| 13) N-TRIACONTANE             | 18.074 | 6575660  | 50.000 ug/ml |
| 14) N-DOTRIACONTANE           | 18.908 | 6450543  | 50.000 ug/ml |
| 15) N-TETRATRIACONTANE        | 19.692 | 5859842  | 50.000 ug/ml |
| 16) N-HEXATRIACONTANE         | 20.433 | 5124615  | 50.000 ug/ml |
| 17) N-OCTATRIACONTANE         | 21.173 | 4565784  | 50.000 ug/ml |
| 18) N-TETRACONTANE            | 22.092 | 4110184  | 50.000 ug/ml |
| -----                         |        |          |              |

(f)=RT Delta > 1/2 Window

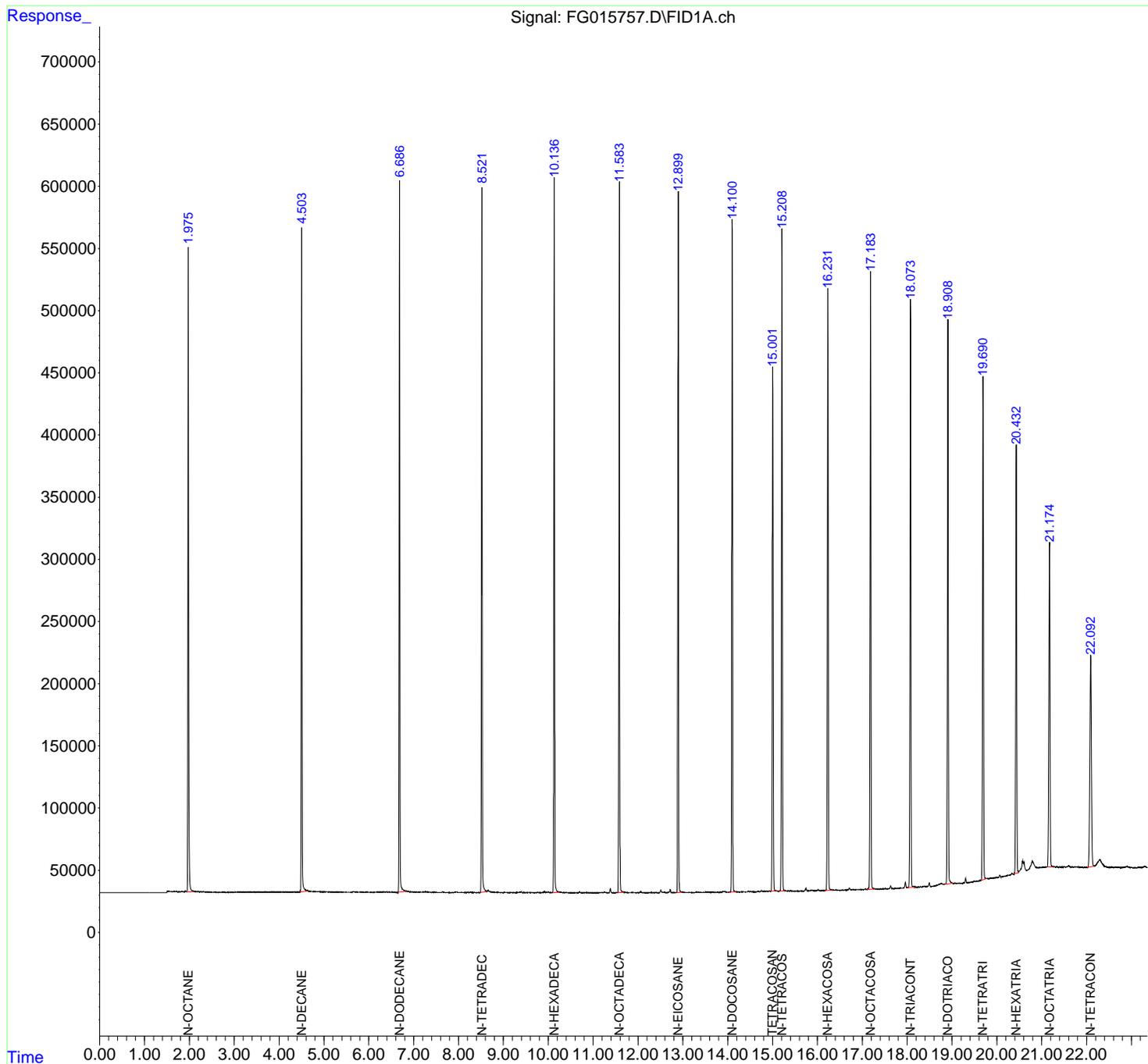
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG042425\  
 Data File : FG015757.D  
 Signal(s) : FID1A.ch  
 Acq On : 24 Apr 2025 11:17  
 Operator : YP\AJ  
 Sample : 50 TRPH STD  
 Misc :  
 ALS Vial : 72 Sample Multiplier: 1

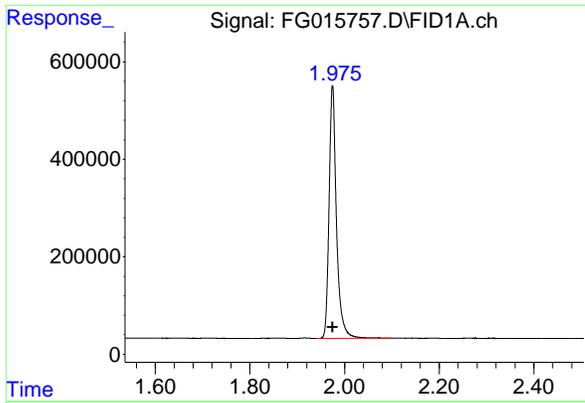
Instrument :  
 FID\_G  
 ClientSampleId :  
 50 TRPH STD

Integration File: autoint1.e  
 Quant Time: Apr 24 11:25:06 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
 Quant Title :  
 QLast Update : Thu Apr 24 11:24:48 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

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



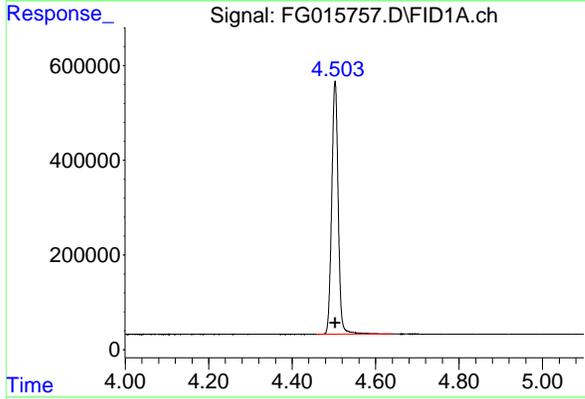
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#1 N-OCTANE

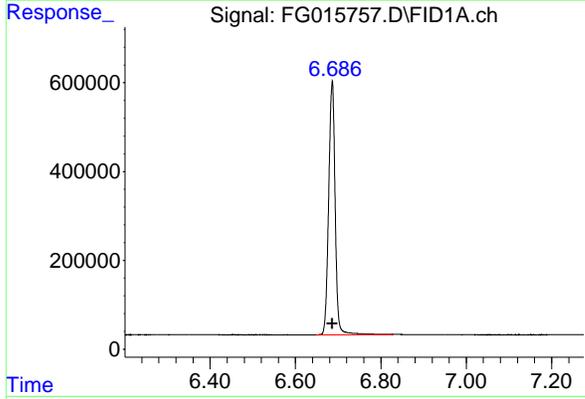
R.T.: 1.975 min  
 Delta R.T.: 0.000 min  
 Response: 5641868  
 Conc: 50.00 ug/ml

Instrument : FID\_G  
 ClientSampleId : 50 TRPH STD



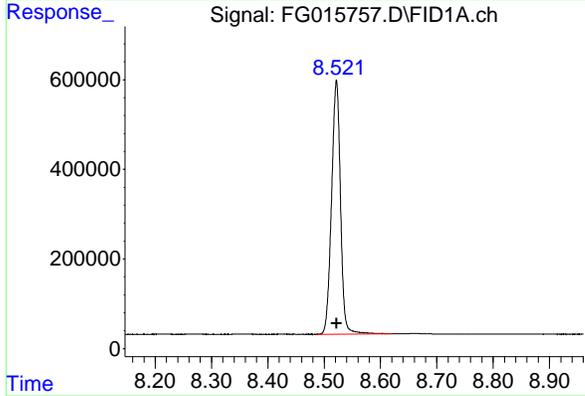
#2 N-DECANE

R.T.: 4.503 min  
 Delta R.T.: 0.000 min  
 Response: 5765123  
 Conc: 50.00 ug/ml



#3 N-DODECANE

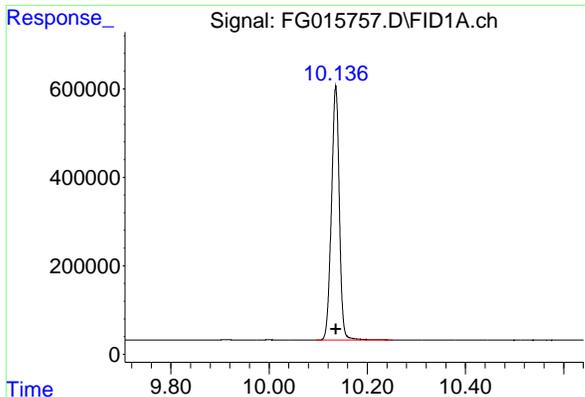
R.T.: 6.686 min  
 Delta R.T.: 0.000 min  
 Response: 6012868  
 Conc: 50.00 ug/ml



#4 N-TETRADECANE

R.T.: 8.522 min  
 Delta R.T.: 0.000 min  
 Response: 6238947  
 Conc: 50.00 ug/ml

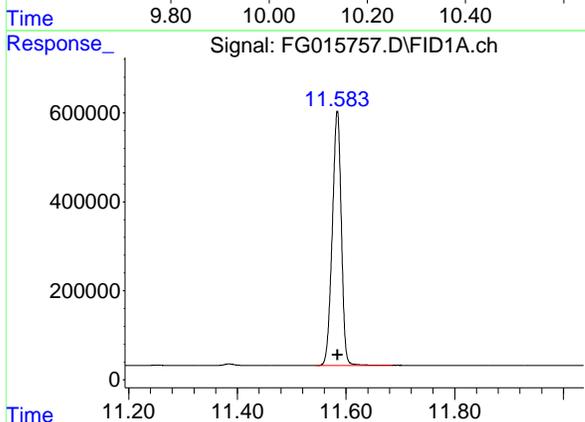
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#5 N-HEXADECANE

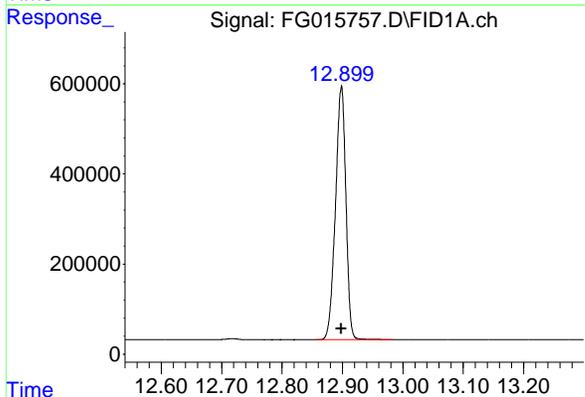
R.T.: 10.136 min  
 Delta R.T.: 0.000 min  
 Response: 6408748  
 Conc: 50.00 ug/ml

Instrument : FID\_G  
 ClientSampleId : 50 TRPH STD



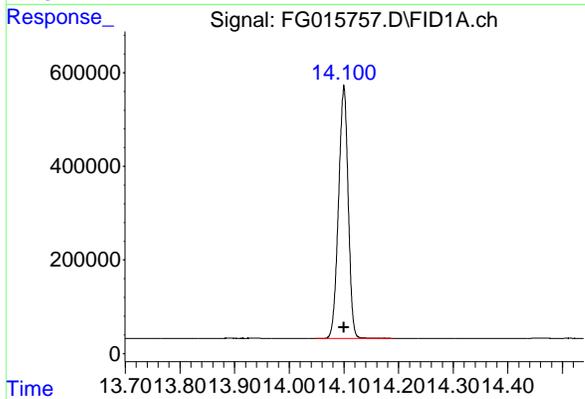
#6 N-OCTADECANE

R.T.: 11.584 min  
 Delta R.T.: 0.000 min  
 Response: 6613302  
 Conc: 50.00 ug/ml



#7 N-EICOSANE

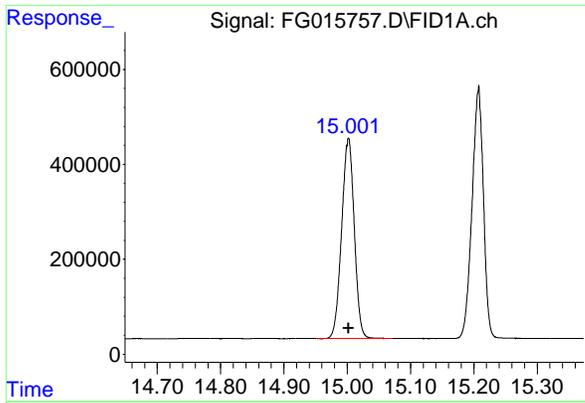
R.T.: 12.898 min  
 Delta R.T.: 0.000 min  
 Response: 6756237  
 Conc: 50.00 ug/ml



#8 N-DOCOSANE

R.T.: 14.100 min  
 Delta R.T.: 0.000 min  
 Response: 6599646  
 Conc: 50.00 ug/ml

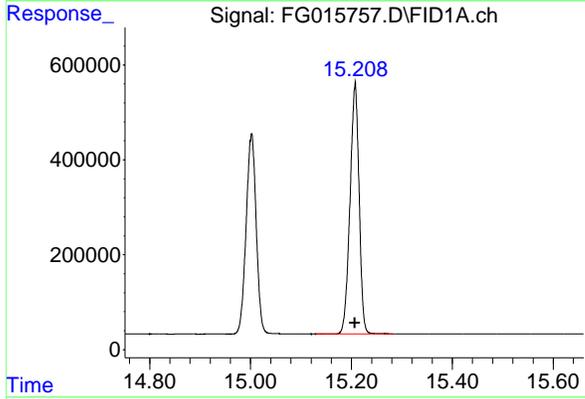
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#9 TETRACOSANE-d50 (SURROGATE)

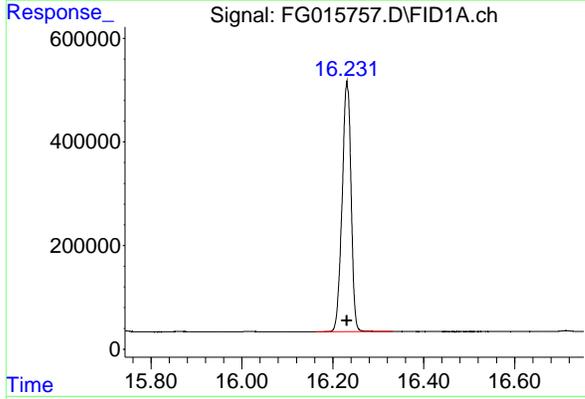
R.T.: 15.002 min  
Delta R.T.: 0.000 min  
Response: 5841495  
Conc: 50.00 ug/ml

Instrument :  
FID\_G  
ClientSampleId :  
50 TRPH STD



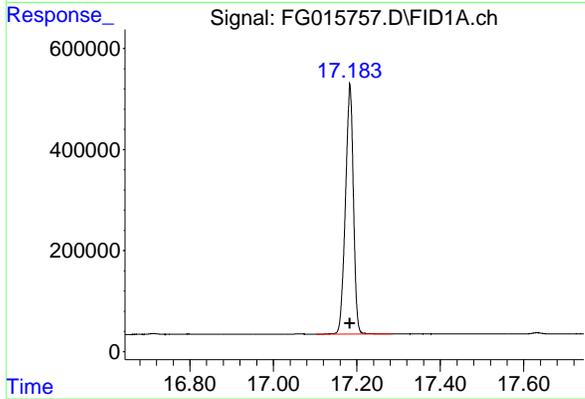
#10 N-TETRACOSANE

R.T.: 15.207 min  
Delta R.T.: 0.000 min  
Response: 6602706  
Conc: 50.00 ug/ml



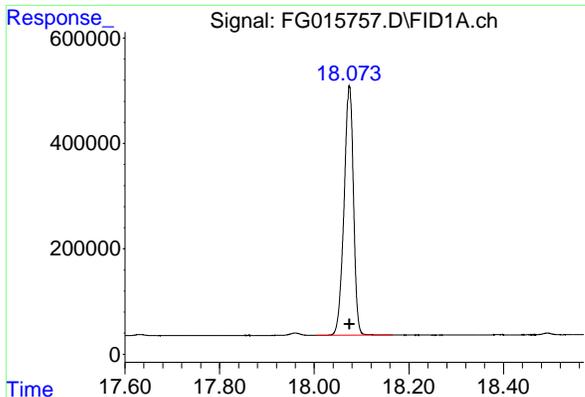
#11 N-HEXACOSANE

R.T.: 16.231 min  
Delta R.T.: 0.000 min  
Response: 6602864  
Conc: 50.00 ug/ml



#12 N-OCTACOSANE

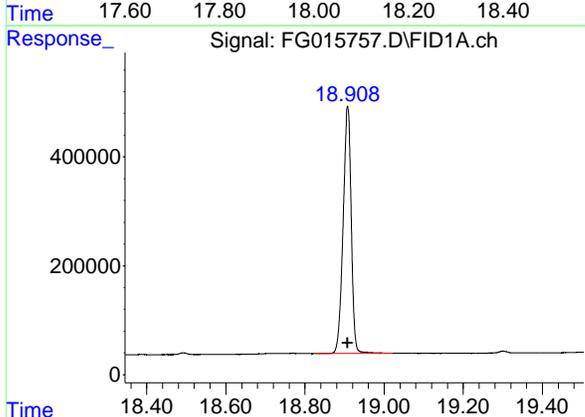
R.T.: 17.184 min  
Delta R.T.: 0.000 min  
Response: 6539080  
Conc: 50.00 ug/ml



#13 N-TRIACONTANE

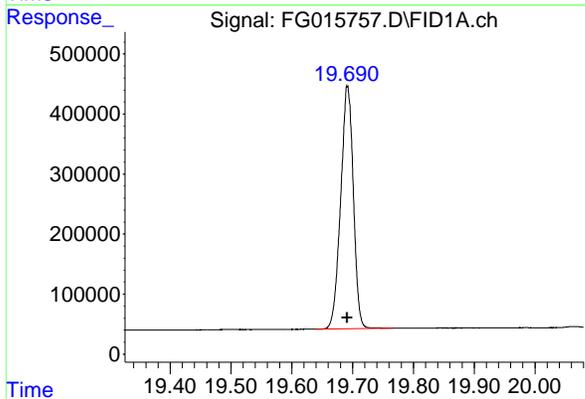
R.T.: 18.074 min  
Delta R.T.: 0.000 min  
Response: 6575660  
Conc: 50.00 ug/ml

Instrument : FID\_G  
Client Sample Id : 50 TRPH STD



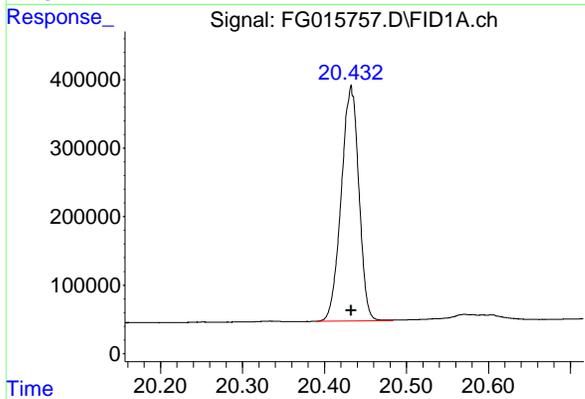
#14 N-DOTRIACONTANE

R.T.: 18.908 min  
Delta R.T.: 0.000 min  
Response: 6450543  
Conc: 50.00 ug/ml



#15 N-TETRATRIACONTANE

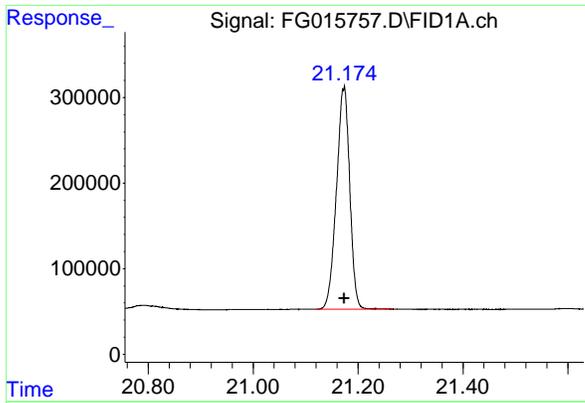
R.T.: 19.692 min  
Delta R.T.: 0.000 min  
Response: 5859842  
Conc: 50.00 ug/ml



#16 N-HEXATRIACONTANE

R.T.: 20.433 min  
Delta R.T.: 0.000 min  
Response: 5124615  
Conc: 50.00 ug/ml

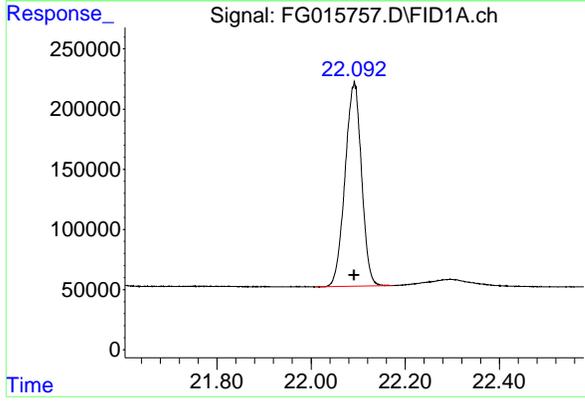
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#17 N-OCTATRIACONTANE

R.T.: 21.173 min  
 Delta R.T.: 0.000 min  
 Response: 4565784  
 Conc: 50.00 ug/ml

Instrument :  
 FID\_G  
 ClientSampleId :  
 50 TRPH STD



#18 N-TETRACONTANE

R.T.: 22.092 min  
 Delta R.T.: 0.000 min  
 Response: 4110184  
 Conc: 50.00 ug/ml

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Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG042425\  
 Data File : FG015757.D  
 Signal(s) : FID1A.ch  
 Acq On : 24 Apr 2025 11:17  
 Sample : 50 TRPH STD  
 Misc :  
 ALS Vial : 72 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
 Title :

Signal : FID1A.ch

| peak #                  | R. T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|-------------------------|-----------|-----------|---------|-------|-------------|-----------|-------------|------------|
| 1                       | 1.975     | 1.940     | 2.102   | PB    | 518391      | 5641868   | 83.51%      | 5.209%     |
| 2                       | 4.503     | 4.458     | 4.641   | BB    | 534310      | 5765123   | 85.33%      | 5.323%     |
| 3                       | 6.686     | 6.648     | 6.828   | BV    | 569163      | 6012868   | 89.00%      | 5.552%     |
| 4                       | 8.522     | 8.486     | 8.622   | BV    | 566758      | 6238947   | 92.34%      | 5.760%     |
| 5                       | 10.136    | 10.096    | 10.252  | BB    | 572817      | 6408748   | 94.86%      | 5.917%     |
| 6                       | 11.584    | 11.545    | 11.686  | BB    | 570837      | 6613302   | 97.88%      | 6.106%     |
| 7                       | 12.898    | 12.857    | 12.983  | BB    | 561391      | 6756237   | 100.00%     | 6.238%     |
| 8                       | 14.100    | 14.049    | 14.189  | BB    | 540265      | 6599646   | 97.68%      | 6.093%     |
| 9                       | 15.002    | 14.951    | 15.072  | BV    | 421352      | 5841495   | 86.46%      | 5.393%     |
| 10                      | 15.207    | 15.130    | 15.282  | BB    | 528649      | 6602706   | 97.73%      | 6.096%     |
| 11                      | 16.231    | 16.163    | 16.332  | BB    | 484089      | 6602864   | 97.73%      | 6.096%     |
| 12                      | 17.184    | 17.102    | 17.286  | BB    | 494986      | 6539080   | 96.79%      | 6.037%     |
| 13                      | 18.074    | 18.004    | 18.166  | BB    | 471435      | 6575660   | 97.33%      | 6.071%     |
| 14                      | 18.908    | 18.828    | 19.022  | BB    | 453993      | 6450543   | 95.48%      | 5.956%     |
| 15                      | 19.692    | 19.640    | 19.766  | BB    | 402842      | 5859842   | 86.73%      | 5.410%     |
| 16                      | 20.433    | 20.390    | 20.483  | BV    | 343234      | 5124615   | 75.85%      | 4.731%     |
| 17                      | 21.173    | 21.120    | 21.266  | BB    | 258145      | 4565784   | 67.58%      | 4.215%     |
| 18                      | 22.092    | 22.011    | 22.173  | BV    | 170162      | 4110184   | 60.84%      | 3.795%     |
| Sum of corrected areas: |           |           |         |       |             | 108309511 |             |            |

FG042425.M Thu Apr 24 13:17:40 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG042425\  
 Data File : FG015758.D  
 Signal(s) : FID1A.ch  
 Acq On : 24 Apr 2025 11:46  
 Operator : YP\AJ  
 Sample : 20 TRPH STD  
 Misc :  
 ALS Vial : 73 Sample Multiplier: 1

Instrument :  
 FID\_G  
 ClientSampleId :  
 20 TRPH STD

Integration File: autoint1.e  
 Quant Time: Apr 24 11:54:15 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
 Quant Title :  
 QLast Update : Thu Apr 24 11:54:05 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

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

| Compound                      | R.T.   | Response | Conc Units   |
|-------------------------------|--------|----------|--------------|
| -----                         |        |          |              |
| System Monitoring Compounds   |        |          |              |
| 9) S TETRACOSANE-d50 (SURR... | 15.000 | 2321990  | 20.251 ug/ml |
| Target Compounds              |        |          |              |
| 1) N-OCTANE                   | 1.974  | 2237524  | 20.057 ug/ml |
| 2) N-DECANE                   | 4.502  | 2238396  | 19.771 ug/ml |
| 3) N-DODECANE                 | 6.684  | 2319481  | 19.720 ug/ml |
| 4) N-TETRADECANE              | 8.520  | 2417851  | 19.851 ug/ml |
| 5) N-HEXADECANE               | 10.134 | 2497764  | 19.970 ug/ml |
| 6) N-OCTADECANE               | 11.582 | 2589337  | 20.049 ug/ml |
| 7) N-EICOSANE                 | 12.895 | 2668069  | 20.174 ug/ml |
| 8) N-DOCOSANE                 | 14.098 | 2616865  | 20.221 ug/ml |
| 10) N-TETRACOSANE             | 15.204 | 2622580  | 20.224 ug/ml |
| 11) N-HEXACOSANE              | 16.229 | 2625744  | 20.252 ug/ml |
| 12) N-OCTACOSANE              | 17.181 | 2614668  | 20.314 ug/ml |
| 13) N-TRIACONTANE             | 18.070 | 2657089  | 20.447 ug/ml |
| 14) N-DOTRIACONTANE           | 18.904 | 2600271  | 20.490 ug/ml |
| 15) N-TETRATRIACONTANE        | 19.689 | 2454733  | 21.076 ug/ml |
| 16) N-HEXATRIACONTANE         | 20.430 | 2212619  | 21.695 ug/ml |
| 17) N-OCTATRIACONTANE         | 21.168 | 2053554  | 22.497 ug/ml |
| 18) N-TETRACONTANE            | 22.089 | 1847089  | 22.327 ug/ml |

(f)=RT Delta > 1/2 Window

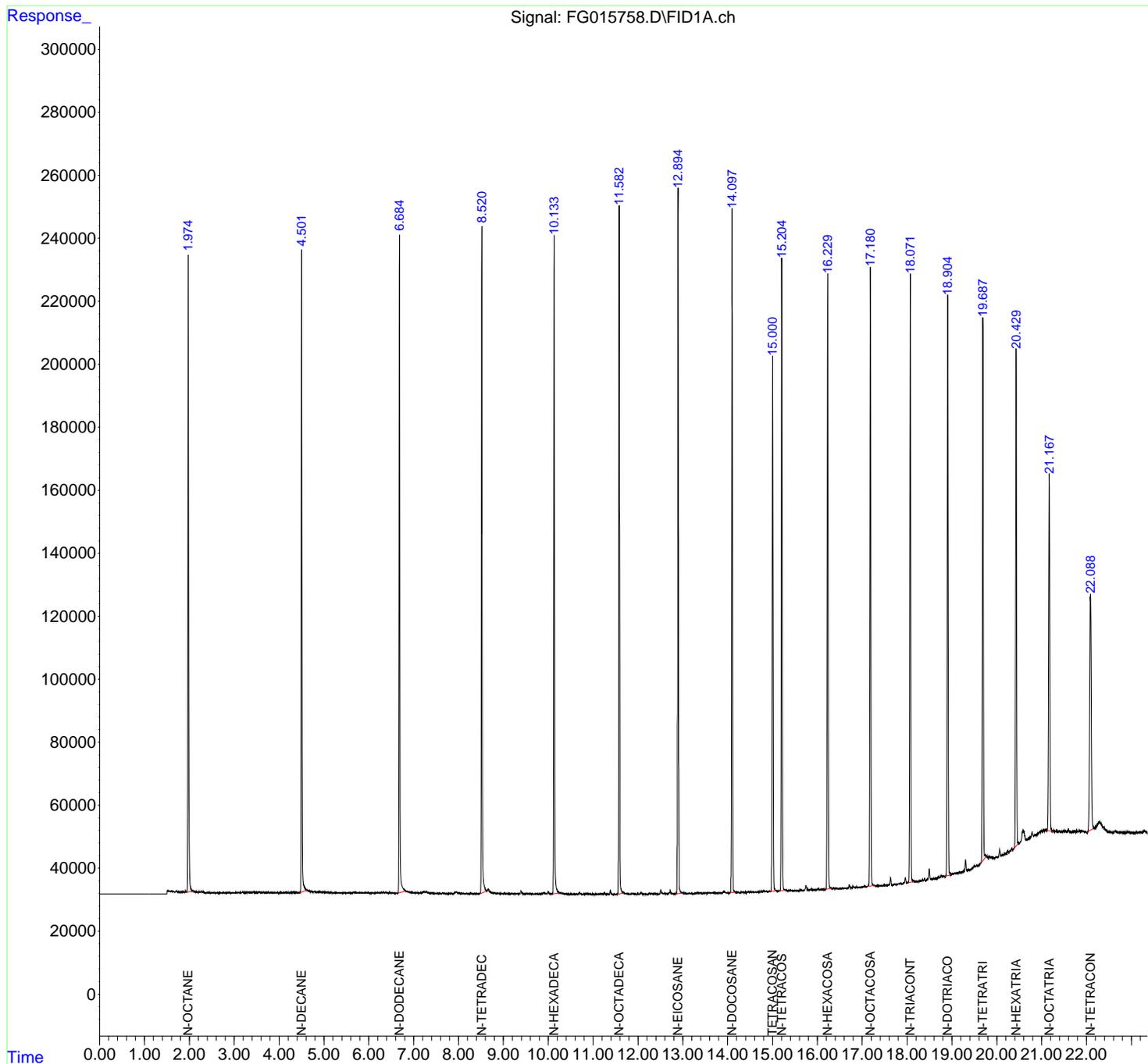
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG042425\  
 Data File : FG015758.D  
 Signal(s) : FID1A.ch  
 Acq On : 24 Apr 2025 11:46  
 Operator : YP\AJ  
 Sample : 20 TRPH STD  
 Misc :  
 ALS Vial : 73 Sample Multiplier: 1

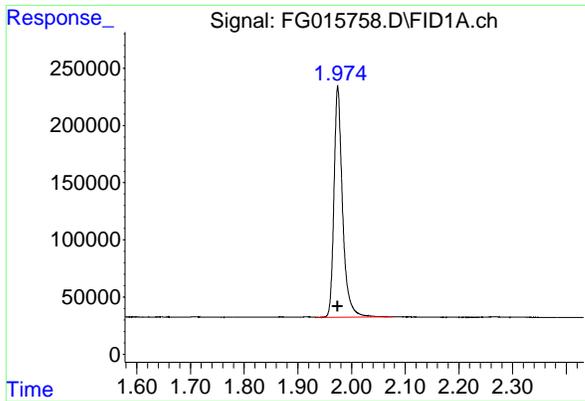
Instrument :  
 FID\_G  
 ClientSampleId :  
 20 TRPH STD

Integration File: autoint1.e  
 Quant Time: Apr 24 11:54:15 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
 Quant Title :  
 QLast Update : Thu Apr 24 11:54:05 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

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



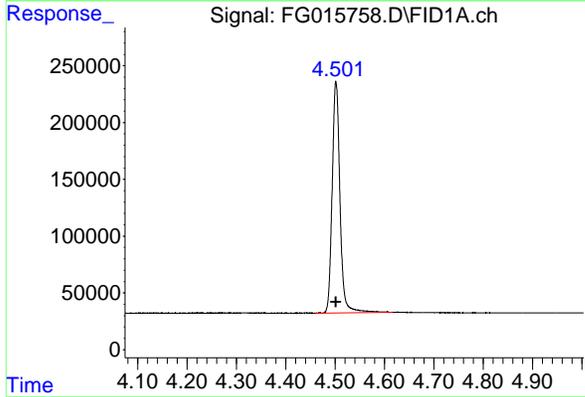
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#1 N-OCTANE

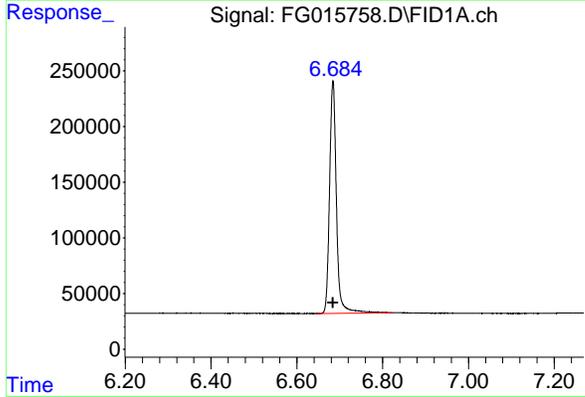
R.T.: 1.974 min  
Delta R.T.: 0.000 min  
Response: 2237524  
Conc: 20.06 ug/ml

Instrument :  
FID\_G  
ClientSampleId :  
20 TRPH STD



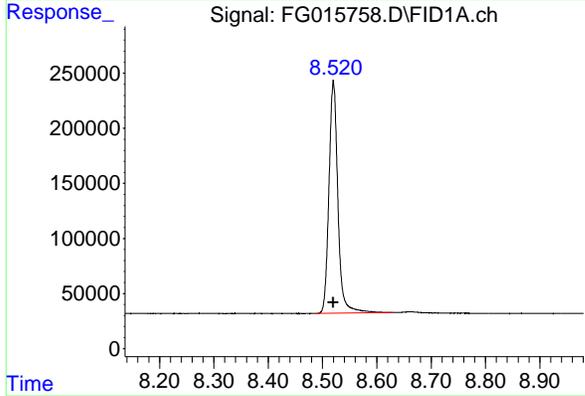
#2 N-DECANE

R.T.: 4.502 min  
Delta R.T.: 0.000 min  
Response: 2238396  
Conc: 19.77 ug/ml



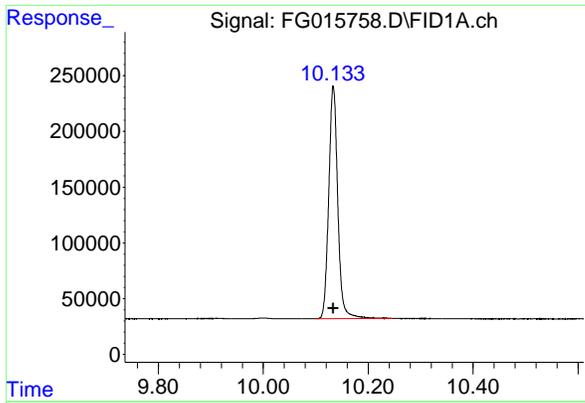
#3 N-DODECANE

R.T.: 6.684 min  
Delta R.T.: 0.000 min  
Response: 2319481  
Conc: 19.72 ug/ml



#4 N-TETRADECANE

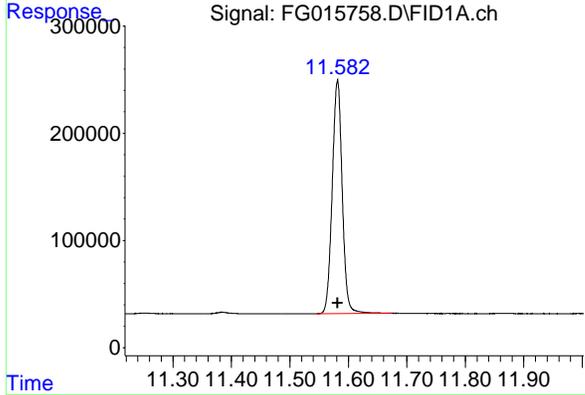
R.T.: 8.520 min  
Delta R.T.: 0.000 min  
Response: 2417851  
Conc: 19.85 ug/ml



#5 N-HEXADECANE

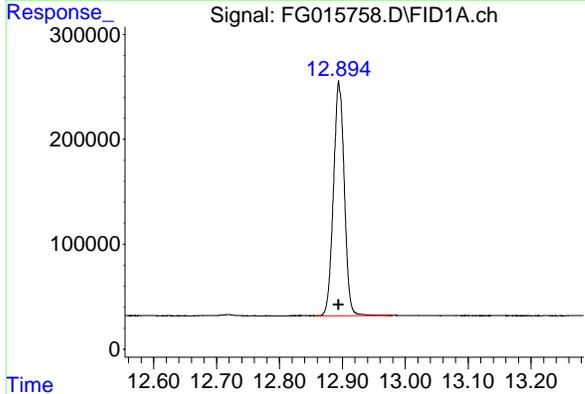
R.T.: 10.134 min  
 Delta R.T.: 0.000 min  
 Response: 2497764  
 Conc: 19.97 ug/ml

Instrument : FID\_G  
 ClientSampleId : 20 TRPH STD



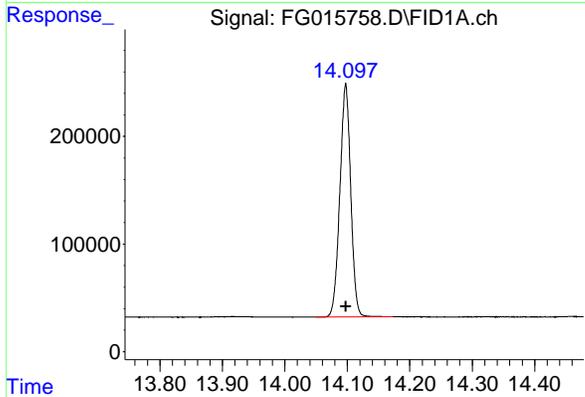
#6 N-OCTADECANE

R.T.: 11.582 min  
 Delta R.T.: 0.000 min  
 Response: 2589337  
 Conc: 20.05 ug/ml



#7 N-EICOSANE

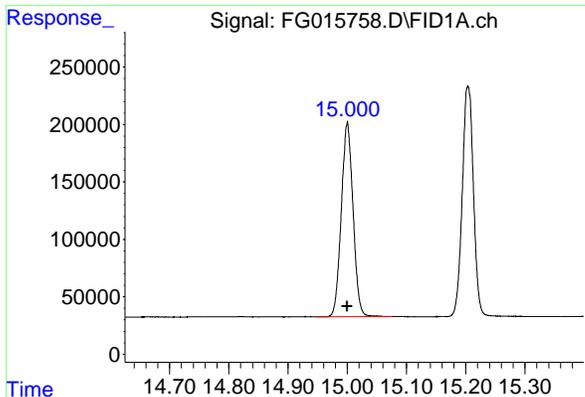
R.T.: 12.895 min  
 Delta R.T.: 0.000 min  
 Response: 2668069  
 Conc: 20.17 ug/ml



#8 N-DOCOSANE

R.T.: 14.098 min  
 Delta R.T.: 0.000 min  
 Response: 2616865  
 Conc: 20.22 ug/ml

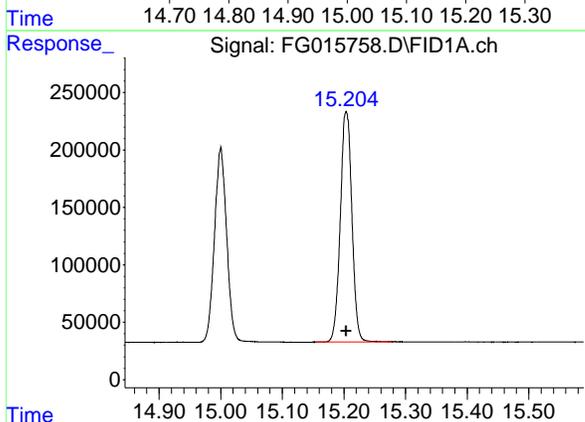
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#9 TETRACOSANE-d50 (SURROGATE)

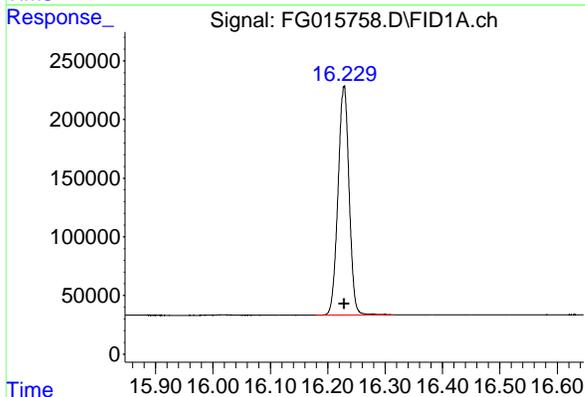
R.T.: 15.000 min  
 Delta R.T.: 0.000 min  
 Response: 2321990  
 Conc: 20.25 ug/ml

Instrument : FID\_G  
 ClientSampleId : 20 TRPH STD



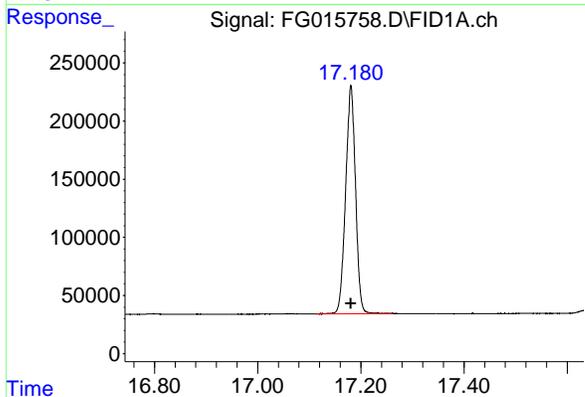
#10 N-TETRACOSANE

R.T.: 15.204 min  
 Delta R.T.: 0.000 min  
 Response: 2622580  
 Conc: 20.22 ug/ml



#11 N-HEXACOSANE

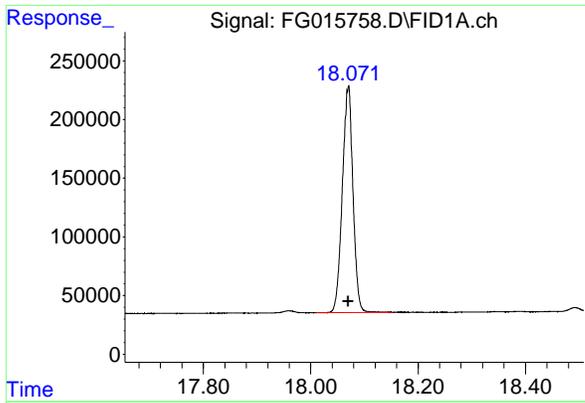
R.T.: 16.229 min  
 Delta R.T.: 0.000 min  
 Response: 2625744  
 Conc: 20.25 ug/ml



#12 N-OCTACOSANE

R.T.: 17.181 min  
 Delta R.T.: 0.000 min  
 Response: 2614668  
 Conc: 20.31 ug/ml

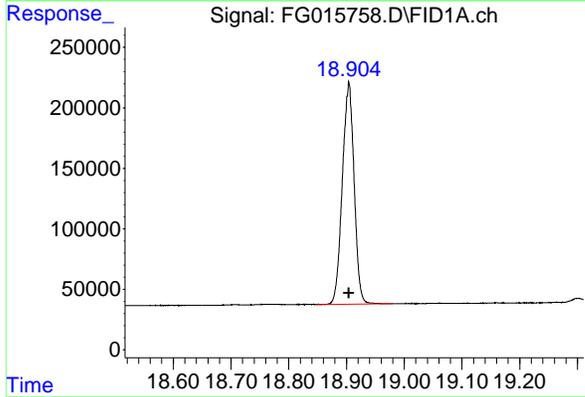
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#13 N-TRIACONTANE

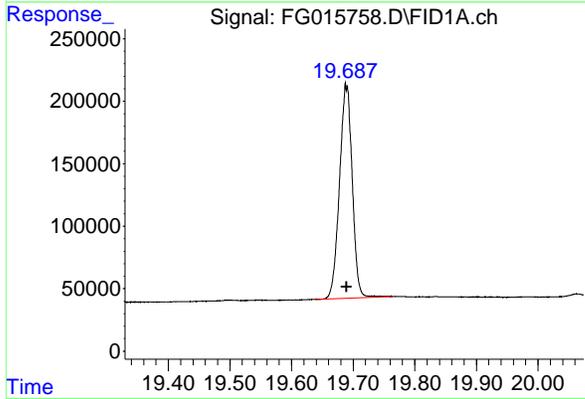
R.T.: 18.070 min  
Delta R.T.: 0.000 min  
Response: 2657089  
Conc: 20.45 ug/ml

Instrument :  
FID\_G  
ClientSampleId :  
20 TRPH STD



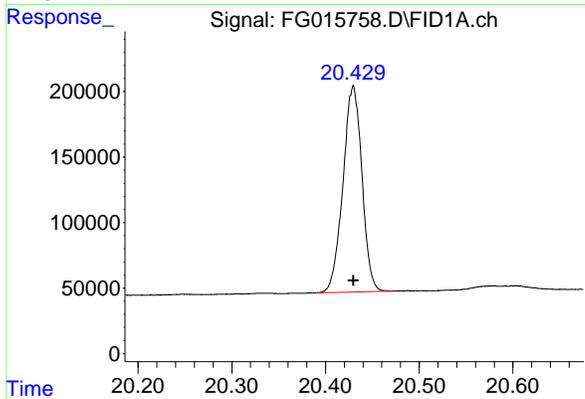
#14 N-DOTRIACONTANE

R.T.: 18.904 min  
Delta R.T.: 0.000 min  
Response: 2600271  
Conc: 20.49 ug/ml



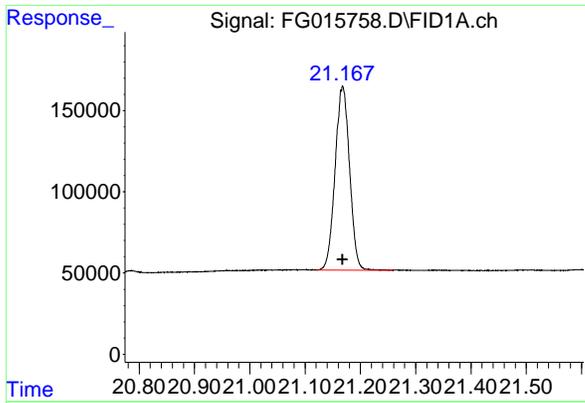
#15 N-TETRATRIACONTANE

R.T.: 19.689 min  
Delta R.T.: 0.000 min  
Response: 2454733  
Conc: 21.08 ug/ml



#16 N-HEXATRIACONTANE

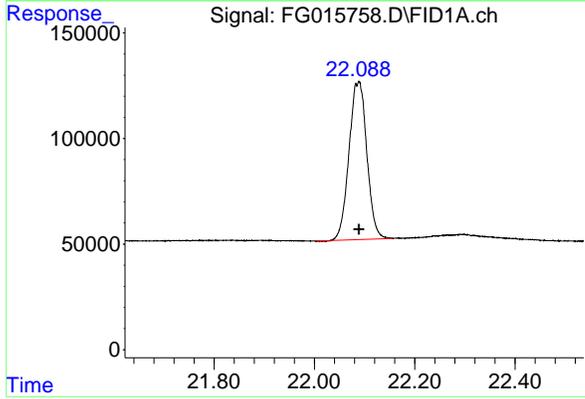
R.T.: 20.430 min  
Delta R.T.: 0.000 min  
Response: 2212619  
Conc: 21.69 ug/ml



#17 N-OCTATRIACONTANE

R.T.: 21.168 min  
 Delta R.T.: 0.000 min  
 Response: 2053554  
 Conc: 22.50 ug/ml

Instrument :  
 FID\_G  
 ClientSampleId :  
 20 TRPH STD



#18 N-TETRACONTANE

R.T.: 22.089 min  
 Delta R.T.: 0.000 min  
 Response: 1847089  
 Conc: 22.33 ug/ml

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Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG042425\  
 Data File : FG015758.D  
 Signal(s) : FID1A.ch  
 Acq On : 24 Apr 2025 11:46  
 Sample : 20 TRPH STD  
 Misc :  
 ALS Vial : 73 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
 Title :

Signal : FID1A.ch

| peak #                  | R. T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|-------------------------|-----------|-----------|---------|-------|-------------|-----------|-------------|------------|
| 1                       | 1.975     | 1.934     | 2.077   | BB    | 201920      | 2237524   | 83.86%      | 5.132%     |
| 2                       | 4.502     | 4.462     | 4.617   | BB    | 203820      | 2238396   | 83.90%      | 5.134%     |
| 3                       | 6.684     | 6.645     | 6.823   | BB    | 208563      | 2319481   | 86.93%      | 5.320%     |
| 4                       | 8.520     | 8.488     | 8.629   | BB    | 211119      | 2417851   | 90.62%      | 5.546%     |
| 5                       | 10.134    | 10.101    | 10.247  | BB    | 208652      | 2497764   | 93.62%      | 5.729%     |
| 6                       | 11.582    | 11.545    | 11.676  | BB    | 218192      | 2589337   | 97.05%      | 5.939%     |
| 7                       | 12.895    | 12.858    | 12.980  | BB    | 223239      | 2668069   | 100.00%     | 6.120%     |
| 8                       | 14.098    | 14.050    | 14.173  | BB    | 216965      | 2616865   | 98.08%      | 6.003%     |
| 9                       | 15.000    | 14.948    | 15.077  | BB    | 168988      | 2321990   | 87.03%      | 5.326%     |
| 10                      | 15.204    | 15.155    | 15.279  | BB    | 200433      | 2622580   | 98.30%      | 6.016%     |
| 11                      | 16.229    | 16.180    | 16.313  | BB    | 194531      | 2625744   | 98.41%      | 6.023%     |
| 12                      | 17.181    | 17.113    | 17.262  | BB    | 196368      | 2614668   | 98.00%      | 5.998%     |
| 13                      | 18.070    | 18.010    | 18.153  | BB    | 192263      | 2657089   | 99.59%      | 6.095%     |
| 14                      | 18.904    | 18.848    | 18.980  | BB    | 183783      | 2600271   | 97.46%      | 5.965%     |
| 15                      | 19.689    | 19.640    | 19.764  | BB    | 166134      | 2454733   | 92.00%      | 5.631%     |
| 16                      | 20.430    | 20.390    | 20.472  | BB    | 158134      | 2212619   | 82.93%      | 5.075%     |
| 17                      | 21.168    | 21.120    | 21.258  | BB    | 113394      | 2053554   | 76.97%      | 4.710%     |
| 18                      | 22.089    | 22.003    | 22.156  | BB    | 74811       | 1847089   | 69.23%      | 4.237%     |
| Sum of corrected areas: |           |           |         |       |             | 43595624  |             |            |

FG042425.M Thu Apr 24 13:18:10 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG042425\  
 Data File : FG015759.D  
 Signal(s) : FID1A.ch  
 Acq On : 24 Apr 2025 12:16  
 Operator : YP\AJ  
 Sample : 10 TRPH STD  
 Misc :  
 ALS Vial : 74 Sample Multiplier: 1

Instrument :  
 FID\_G  
 ClientSampleId :  
 10 TRPH STD

Integration File: autoint1.e  
 Quant Time: Apr 24 12:30:56 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
 Quant Title :  
 QLast Update : Thu Apr 24 12:30:48 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

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

| Compound                      | R.T.   | Response | Conc Units   |
|-------------------------------|--------|----------|--------------|
| -----                         |        |          |              |
| System Monitoring Compounds   |        |          |              |
| 9) S TETRACOSANE-d50 (SURR... | 14.999 | 1251163  | 10.669 ug/ml |
| Target Compounds              |        |          |              |
| 1) N-OCTANE                   | 1.975  | 1185572  | 10.463 ug/ml |
| 2) N-DECANE                   | 4.502  | 1151939  | 10.130 ug/ml |
| 3) N-DODECANE                 | 6.684  | 1187117  | 10.070 ug/ml |
| 4) N-TETRADECANE              | 8.520  | 1261201  | 10.264 ug/ml |
| 5) N-HEXADECANE               | 10.134 | 1314900  | 10.380 ug/ml |
| 6) N-OCTADECANE               | 11.581 | 1372556  | 10.463 ug/ml |
| 7) N-EICOSANE                 | 12.894 | 1428003  | 10.586 ug/ml |
| 8) N-DOCOSANE                 | 14.097 | 1398103  | 10.591 ug/ml |
| 10) N-TETRACOSANE             | 15.204 | 1402010  | 10.597 ug/ml |
| 11) N-HEXACOSANE              | 16.227 | 1402199  | 10.599 ug/ml |
| 12) N-OCTACOSANE              | 17.179 | 1399747  | 10.642 ug/ml |
| 13) N-TRIACONTANE             | 18.068 | 1412539  | 10.638 ug/ml |
| 14) N-DOTRIACONTANE           | 18.903 | 1413302  | 10.829 ug/ml |
| 15) N-TETRATRIACONTANE        | 19.688 | 1328246  | 11.017 ug/ml |
| 16) N-HEXATRIACONTANE         | 20.429 | 1238523  | 11.526 ug/ml |
| 17) N-OCTATRIACONTANE         | 21.168 | 1158527  | 11.891 ug/ml |
| 18) N-TETRACONTANE            | 22.088 | 1119497  | 12.434 ug/ml |
| -----                         |        |          |              |

(f)=RT Delta > 1/2 Window

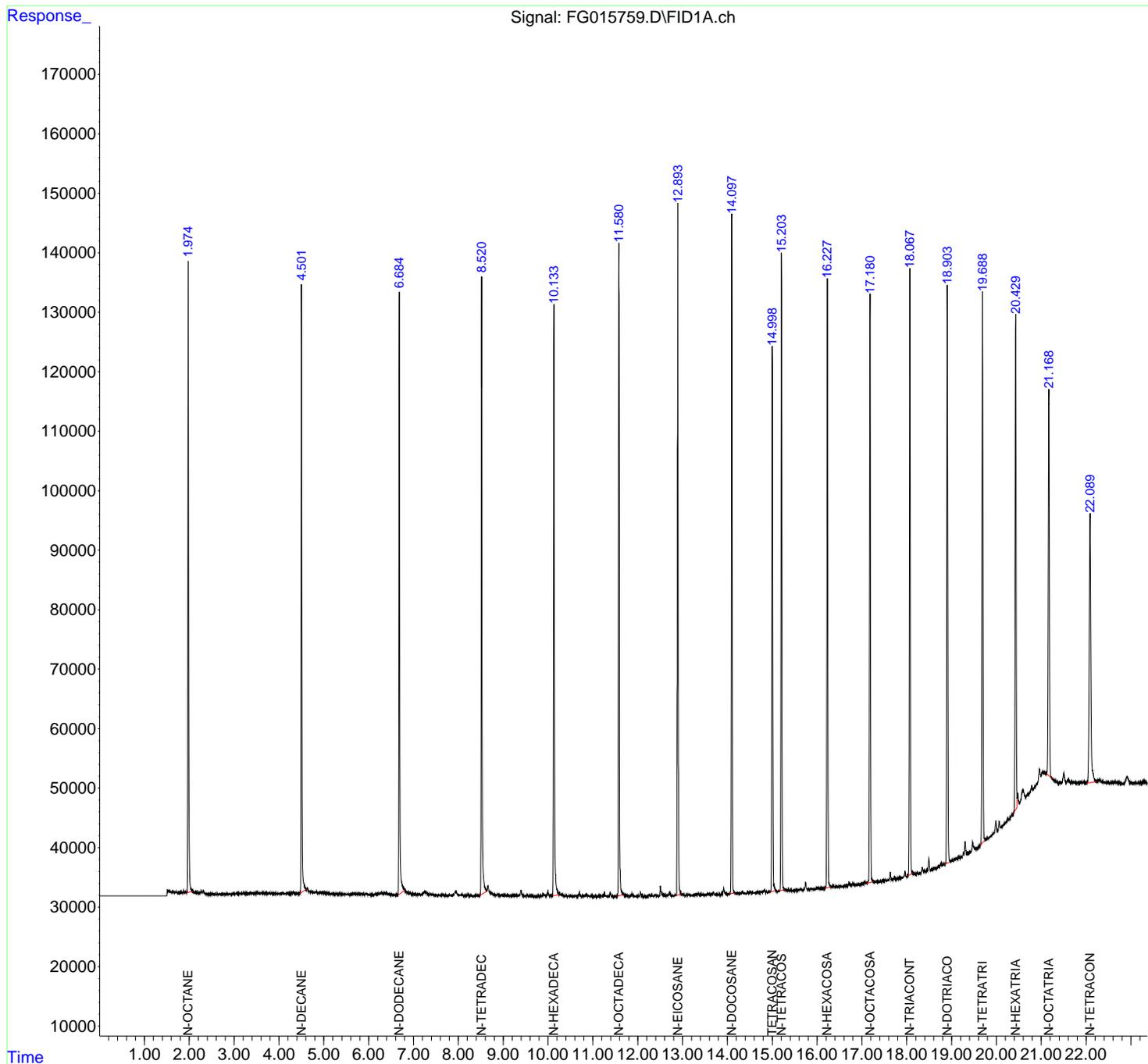
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG042425\  
 Data File : FG015759.D  
 Signal(s) : FID1A.ch  
 Acq On : 24 Apr 2025 12:16  
 Operator : YP\AJ  
 Sample : 10 TRPH STD  
 Misc :  
 ALS Vial : 74 Sample Multiplier: 1

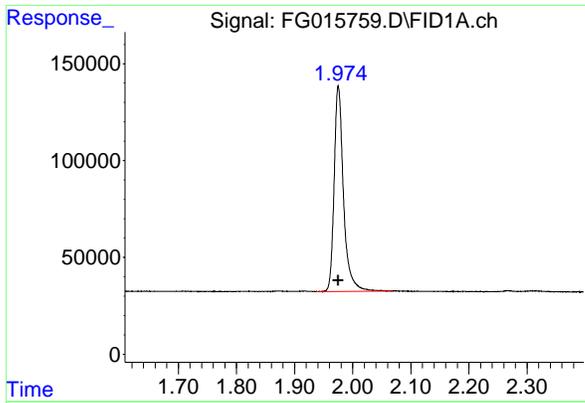
Instrument :  
 FID\_G  
 ClientSampleId :  
 10 TRPH STD

Integration File: autoint1.e  
 Quant Time: Apr 24 12:30:56 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
 Quant Title :  
 QLast Update : Thu Apr 24 12:30:48 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

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



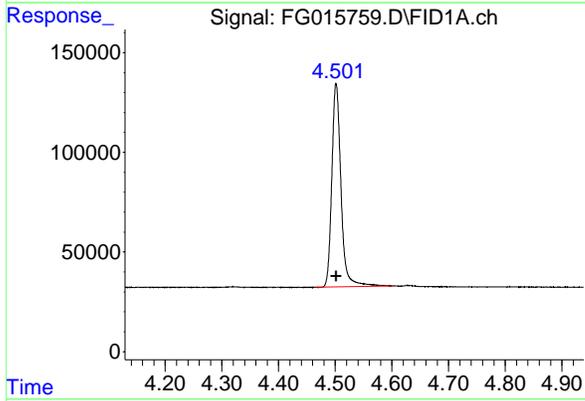
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#1 N-OCTANE

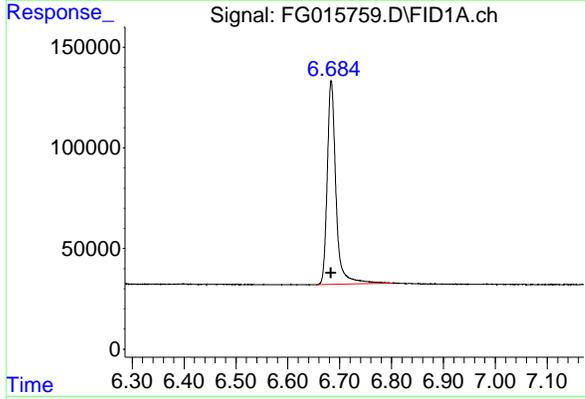
R.T.: 1.975 min  
Delta R.T.: 0.000 min  
Response: 1185572  
Conc: 10.46 ug/ml

Instrument : FID\_G  
ClientSampleId : 10 TRPH STD



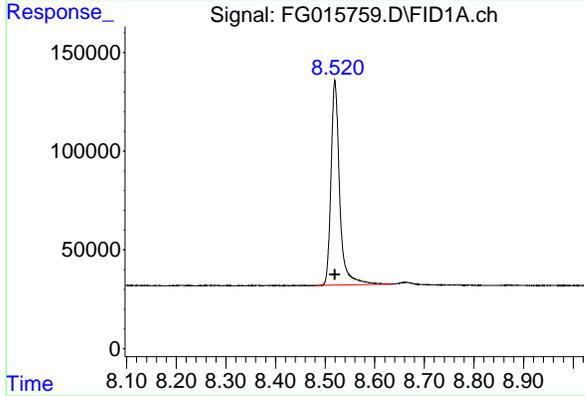
#2 N-DECANE

R.T.: 4.502 min  
Delta R.T.: 0.000 min  
Response: 1151939  
Conc: 10.13 ug/ml



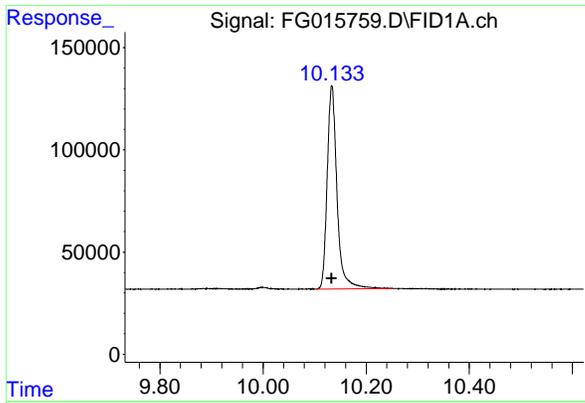
#3 N-DODECANE

R.T.: 6.684 min  
Delta R.T.: 0.000 min  
Response: 1187117  
Conc: 10.07 ug/ml



#4 N-TETRADECANE

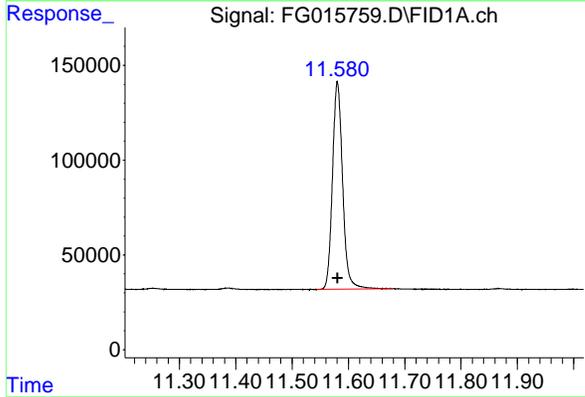
R.T.: 8.520 min  
Delta R.T.: 0.000 min  
Response: 1261201  
Conc: 10.26 ug/ml



#5 N-HEXADECANE

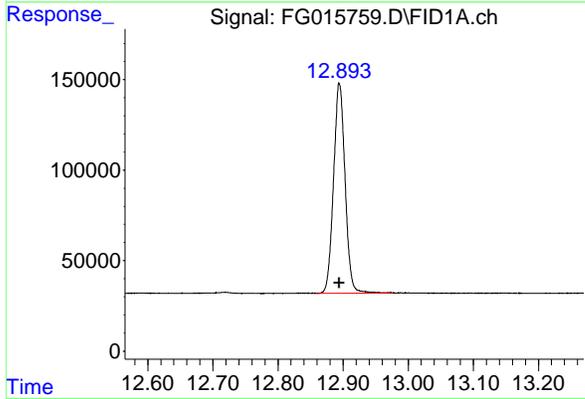
R.T.: 10.134 min  
Delta R.T.: 0.000 min  
Response: 1314900  
Conc: 10.38 ug/ml

Instrument :  
FID\_G  
ClientSampleId :  
10 TRPH STD



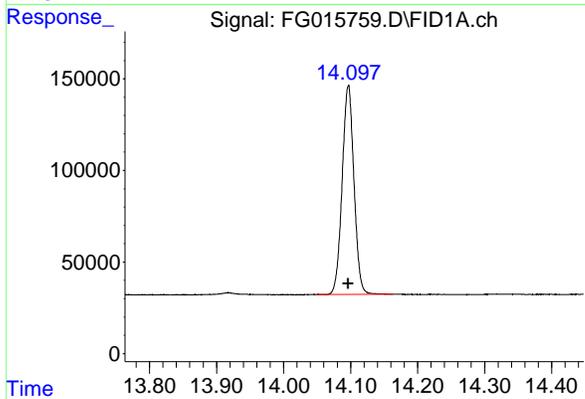
#6 N-OCTADECANE

R.T.: 11.581 min  
Delta R.T.: 0.000 min  
Response: 1372556  
Conc: 10.46 ug/ml



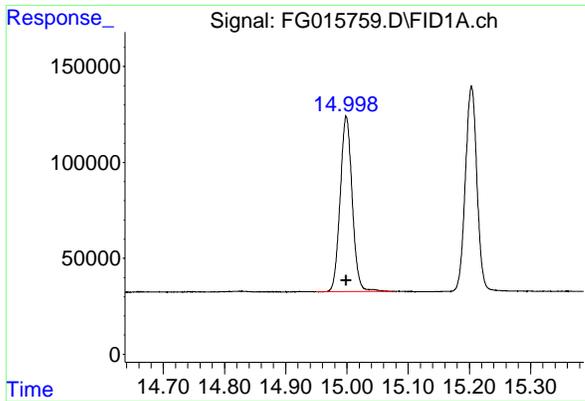
#7 N-EICOSANE

R.T.: 12.894 min  
Delta R.T.: 0.000 min  
Response: 1428003  
Conc: 10.59 ug/ml



#8 N-DOCOSANE

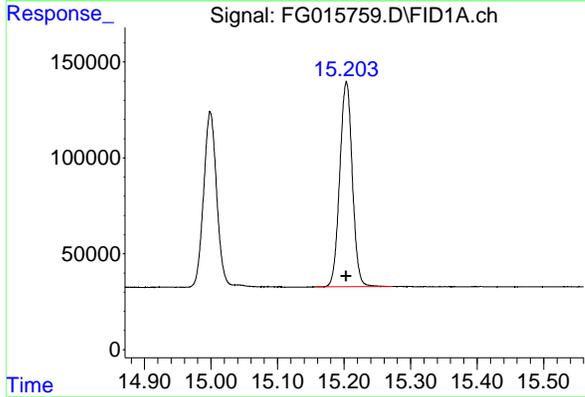
R.T.: 14.097 min  
Delta R.T.: 0.000 min  
Response: 1398103  
Conc: 10.59 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

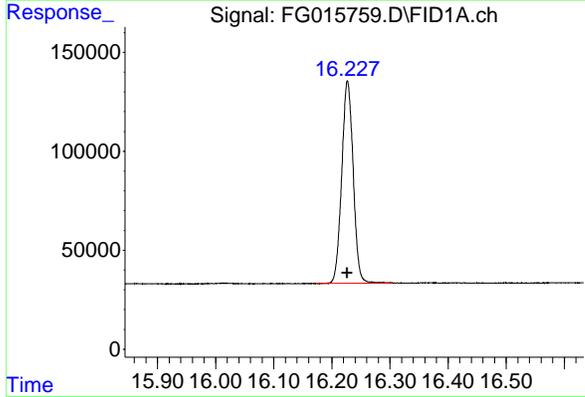
R.T.: 14.999 min  
Delta R.T.: 0.000 min  
Response: 1251163  
Conc: 10.67 ug/ml

Instrument :  
FID\_G  
ClientSampleId :  
10 TRPH STD



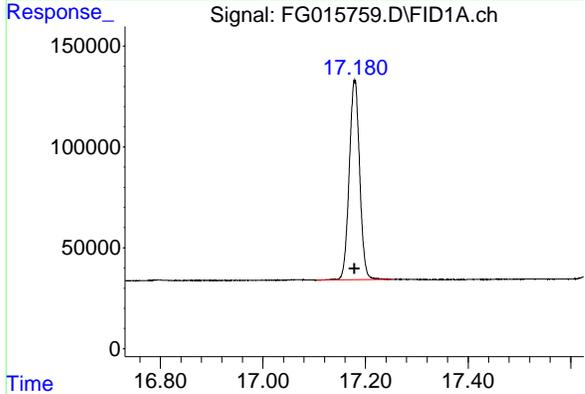
#10 N-TETRACOSANE

R.T.: 15.204 min  
Delta R.T.: 0.000 min  
Response: 1402010  
Conc: 10.60 ug/ml



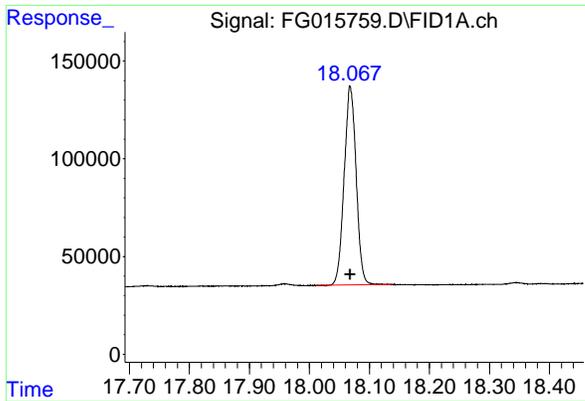
#11 N-HEXACOSANE

R.T.: 16.227 min  
Delta R.T.: 0.000 min  
Response: 1402199  
Conc: 10.60 ug/ml



#12 N-OCTACOSANE

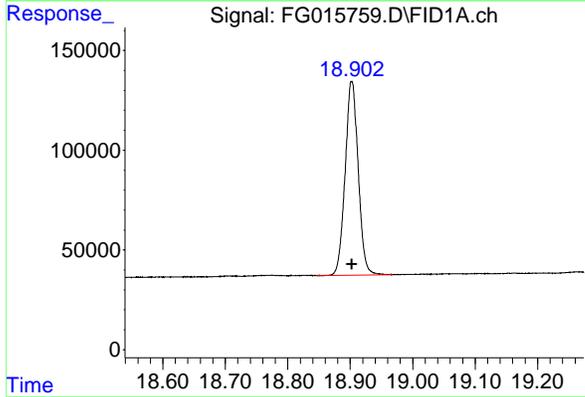
R.T.: 17.179 min  
Delta R.T.: 0.000 min  
Response: 1399747  
Conc: 10.64 ug/ml



#13 N-TRIACONTANE

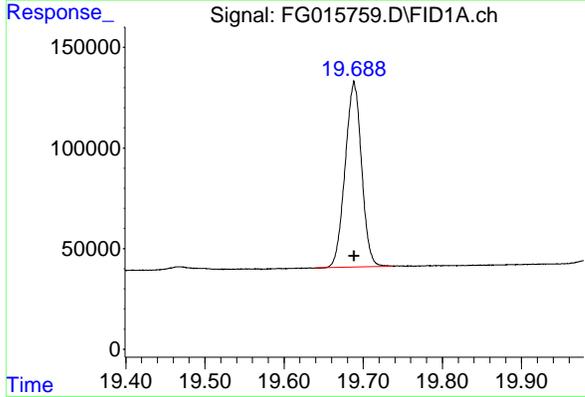
R.T.: 18.068 min  
Delta R.T.: 0.000 min  
Response: 1412539  
Conc: 10.64 ug/ml

Instrument :  
FID\_G  
ClientSampleId :  
10 TRPH STD



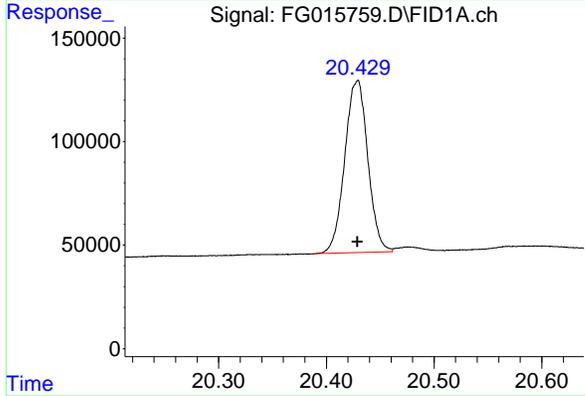
#14 N-DOTRIACONTANE

R.T.: 18.903 min  
Delta R.T.: 0.000 min  
Response: 1413302  
Conc: 10.83 ug/ml



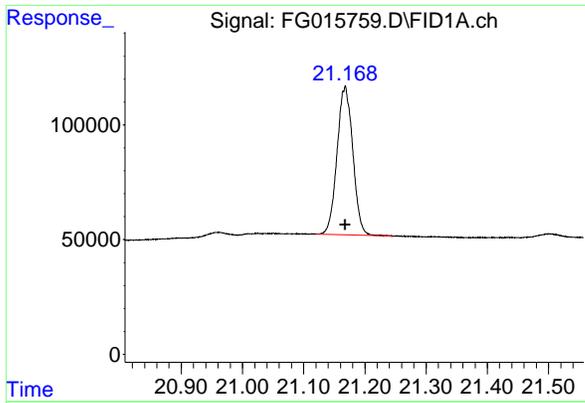
#15 N-TETRATRIACONTANE

R.T.: 19.688 min  
Delta R.T.: 0.000 min  
Response: 1328246  
Conc: 11.02 ug/ml



#16 N-HEXATRIACONTANE

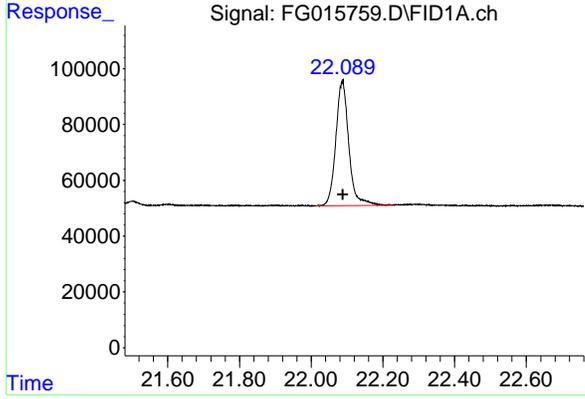
R.T.: 20.429 min  
Delta R.T.: 0.000 min  
Response: 1238523  
Conc: 11.53 ug/ml



#17 N-OCTATRIACONTANE

R.T.: 21.168 min  
 Delta R.T.: 0.000 min  
 Response: 1158527  
 Conc: 11.89 ug/ml

Instrument :  
 FID\_G  
 ClientSampleId :  
 10 TRPH STD



#18 N-TETRACONTANE

R.T.: 22.088 min  
 Delta R.T.: 0.000 min  
 Response: 1119497  
 Conc: 12.43 ug/ml

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Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG042425\  
 Data File : FG015759.D  
 Signal(s) : FID1A.ch  
 Acq On : 24 Apr 2025 12:16  
 Sample : 10 TRPH STD  
 Misc :  
 ALS Vial : 74 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
 Title :

Signal : FID1A.ch

| peak #                  | R. T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|-------------------------|-----------|-----------|---------|-------|-------------|-----------|-------------|------------|
| 1                       | 1.975     | 1.937     | 2.069   | BB    | 105583      | 1185572   | 83.02%      | 5.061%     |
| 2                       | 4.502     | 4.466     | 4.601   | BB    | 102001      | 1151939   | 80.67%      | 4.918%     |
| 3                       | 6.684     | 6.655     | 6.802   | BB    | 101210      | 1187117   | 83.13%      | 5.068%     |
| 4                       | 8.520     | 8.482     | 8.636   | BB    | 103482      | 1261201   | 88.32%      | 5.384%     |
| 5                       | 10.134    | 10.103    | 10.251  | BB    | 99417       | 1314900   | 92.08%      | 5.613%     |
| 6                       | 11.581    | 11.543    | 11.679  | BB    | 109455      | 1372556   | 96.12%      | 5.859%     |
| 7                       | 12.894    | 12.859    | 12.976  | BB    | 115658      | 1428003   | 100.00%     | 6.096%     |
| 8                       | 14.097    | 14.049    | 14.163  | BB    | 114084      | 1398103   | 97.91%      | 5.968%     |
| 9                       | 14.999    | 14.950    | 15.075  | BB    | 91364       | 1251163   | 87.62%      | 5.341%     |
| 10                      | 15.204    | 15.158    | 15.273  | BB    | 106974      | 1402010   | 98.18%      | 5.985%     |
| 11                      | 16.227    | 16.173    | 16.305  | BB    | 102334      | 1402199   | 98.19%      | 5.986%     |
| 12                      | 17.179    | 17.104    | 17.253  | BB    | 97529       | 1399747   | 98.02%      | 5.975%     |
| 13                      | 18.068    | 18.011    | 18.139  | BB    | 101750      | 1412539   | 98.92%      | 6.030%     |
| 14                      | 18.903    | 18.845    | 18.968  | BB    | 97211       | 1413302   | 98.97%      | 6.033%     |
| 15                      | 19.688    | 19.640    | 19.737  | BB    | 92505       | 1328246   | 93.01%      | 5.670%     |
| 16                      | 20.429    | 20.390    | 20.461  | BV    | 83009       | 1238523   | 86.73%      | 5.287%     |
| 17                      | 21.168    | 21.120    | 21.245  | BB    | 64968       | 1158527   | 81.13%      | 4.946%     |
| 18                      | 22.088    | 22.014    | 22.227  | BB    | 45168       | 1119497   | 78.40%      | 4.779%     |
| Sum of corrected areas: |           |           |         |       |             | 23425144  |             |            |

FG042425.M Thu Apr 24 13:18:46 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG042425\  
 Data File : FG015760.D  
 Signal(s) : FID1A.ch  
 Acq On : 24 Apr 2025 12:45  
 Operator : YP\AJ  
 Sample : 5 TRPH STD  
 Misc :  
 ALS Vial : 75 Sample Multiplier: 1

Instrument :  
 FID\_G  
 ClientSampleId :  
 5 TRPH STD

Integration File: autoint1.e  
 Quant Time: Apr 24 12:53:12 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
 Quant Title :  
 QLast Update : Thu Apr 24 12:53:03 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

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

| Compound                      | R.T.   | Response | Conc Units  |
|-------------------------------|--------|----------|-------------|
| -----                         |        |          |             |
| System Monitoring Compounds   |        |          |             |
| 9) S TETRACOSANE-d50 (SURR... | 14.998 | 597973   | 5.079 ug/ml |
| Target Compounds              |        |          |             |
| 1) N-OCTANE                   | 1.977  | 551237   | 4.891 ug/ml |
| 2) N-DECANE                   | 4.503  | 509093   | 4.573 ug/ml |
| 3) N-DODECANE                 | 6.684  | 507207   | 4.426 ug/ml |
| 4) N-TETRADECANE              | 8.520  | 571671   | 4.718 ug/ml |
| 5) N-HEXADECANE               | 10.135 | 604971   | 4.819 ug/ml |
| 6) N-OCTADECANE               | 11.581 | 652759   | 4.981 ug/ml |
| 7) N-EICOSANE                 | 12.895 | 691598   | 5.101 ug/ml |
| 8) N-DOCOSANE                 | 14.096 | 675439   | 5.093 ug/ml |
| 10) N-TETRACOSANE             | 15.202 | 676031   | 5.087 ug/ml |
| 11) N-HEXACOSANE              | 16.227 | 669566   | 5.049 ug/ml |
| 12) N-OCTACOSANE              | 17.179 | 665315   | 5.047 ug/ml |
| 13) N-TRIACONTANE             | 18.069 | 677422   | 5.081 ug/ml |
| 14) N-DOTRIACONTANE           | 18.902 | 685497   | 5.200 ug/ml |
| 15) N-TETRATRIACONTANE        | 19.688 | 612187   | 5.062 ug/ml |
| 16) N-HEXATRIACONTANE         | 20.429 | 531350   | 4.956 ug/ml |
| 17) N-OCTATRIACONTANE         | 21.169 | 459713   | 4.772 ug/ml |
| 18) N-TETRACONTANE            | 22.088 | 425456   | 4.778 ug/ml |
| -----                         |        |          |             |

(f)=RT Delta > 1/2 Window

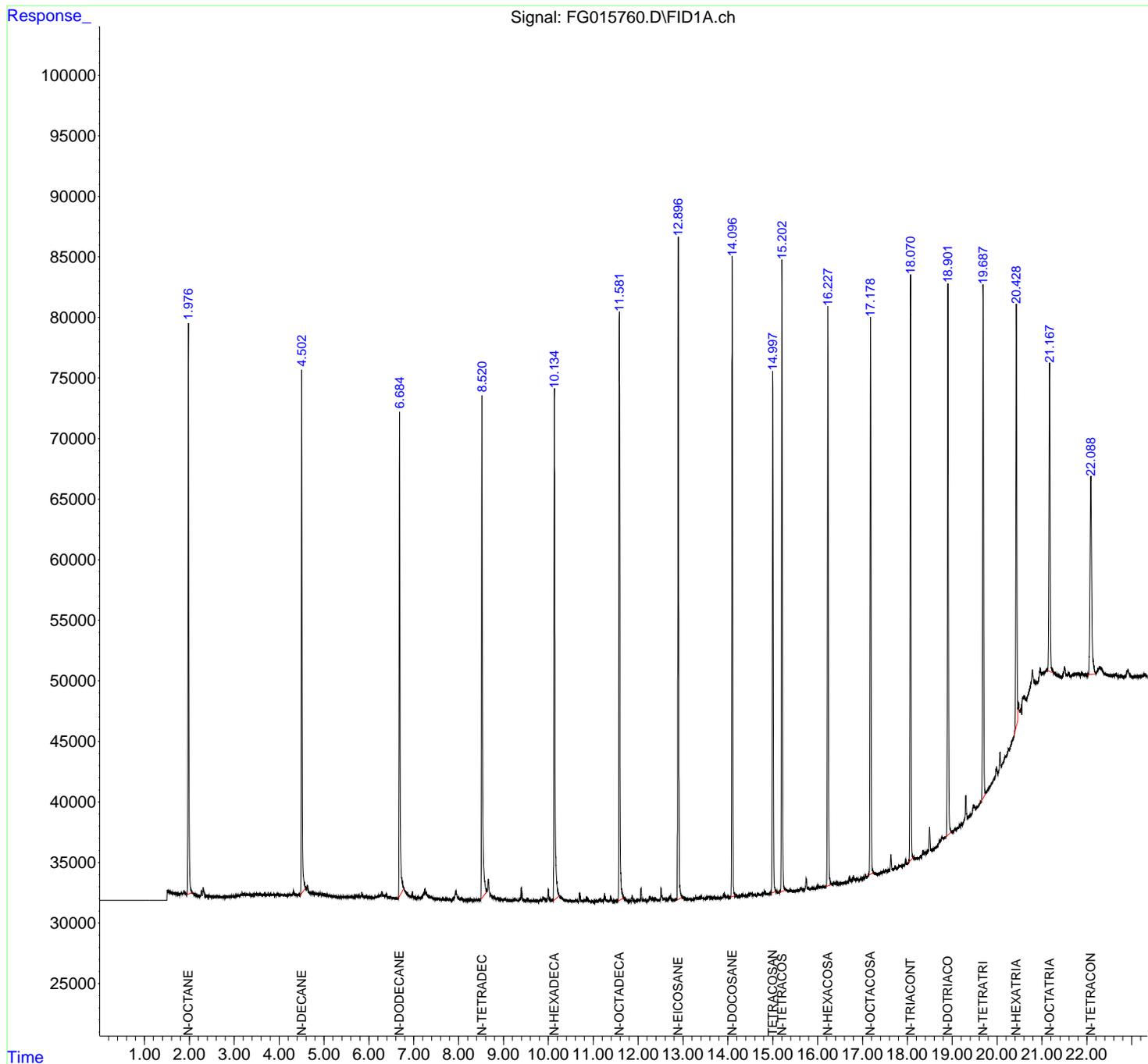
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG042425\  
 Data File : FG015760.D  
 Signal(s) : FID1A.ch  
 Acq On : 24 Apr 2025 12:45  
 Operator : YP\AJ  
 Sample : 5 TRPH STD  
 Misc :  
 ALS Vial : 75 Sample Multiplier: 1

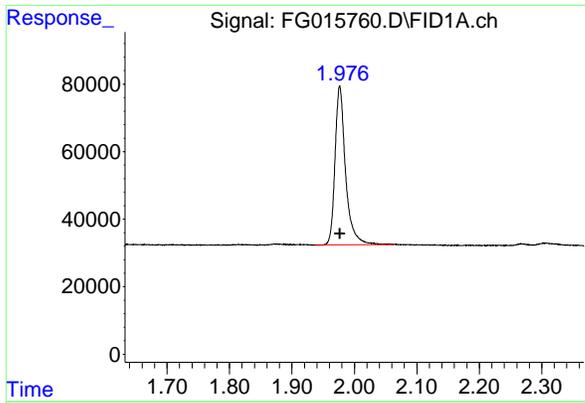
**Instrument :**  
 FID\_G  
**ClientSampleId :**  
 5 TRPH STD

Integration File: autoint1.e  
 Quant Time: Apr 24 12:53:12 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
 Quant Title :  
 QLast Update : Thu Apr 24 12:53:03 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

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



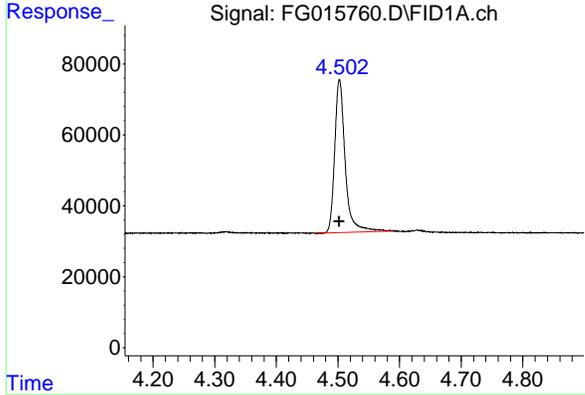
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#1 N-OCTANE

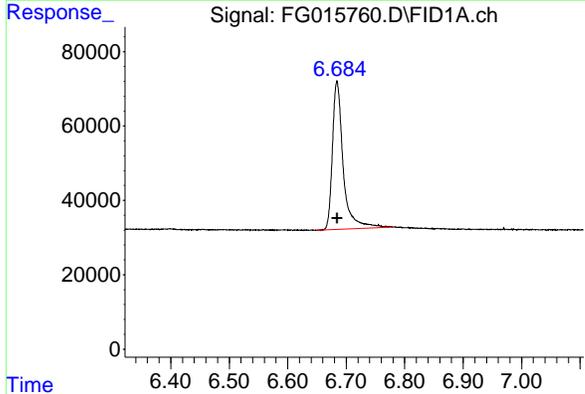
R.T.: 1.977 min  
Delta R.T.: 0.000 min  
Response: 551237  
Conc: 4.89 ug/ml

Instrument :  
FID\_G  
ClientSampleId :  
5 TRPH STD



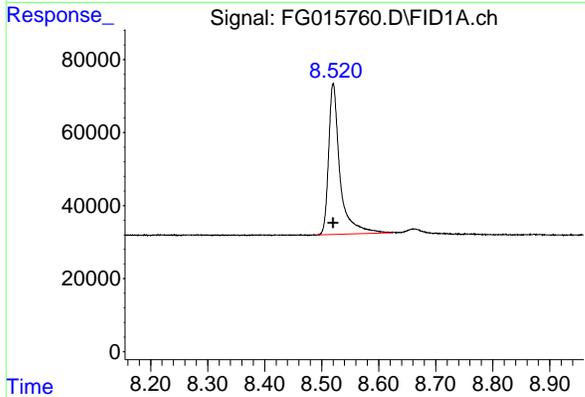
#2 N-DECANE

R.T.: 4.503 min  
Delta R.T.: 0.000 min  
Response: 509093  
Conc: 4.57 ug/ml



#3 N-DODECANE

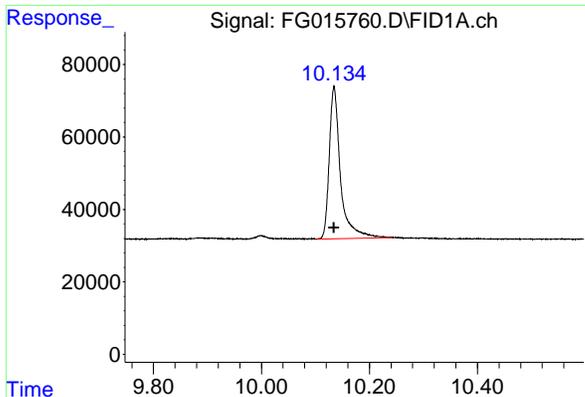
R.T.: 6.684 min  
Delta R.T.: 0.000 min  
Response: 507207  
Conc: 4.43 ug/ml



#4 N-TETRADECANE

R.T.: 8.520 min  
Delta R.T.: 0.000 min  
Response: 571671  
Conc: 4.72 ug/ml

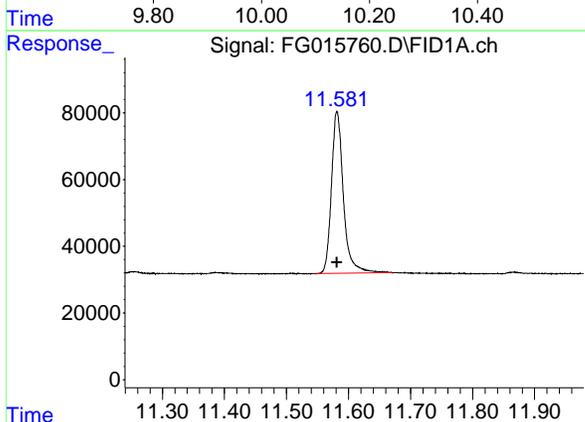
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#5 N-HEXADECANE

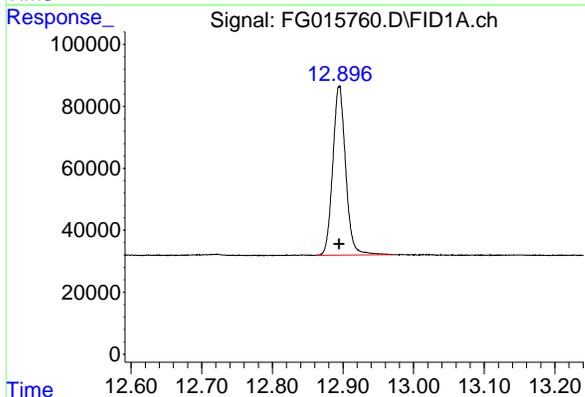
R.T.: 10.135 min  
 Delta R.T.: 0.000 min  
 Response: 604971  
 Conc: 4.82 ug/ml

Instrument : FID\_G  
 ClientSampleId : 5 TRPH STD



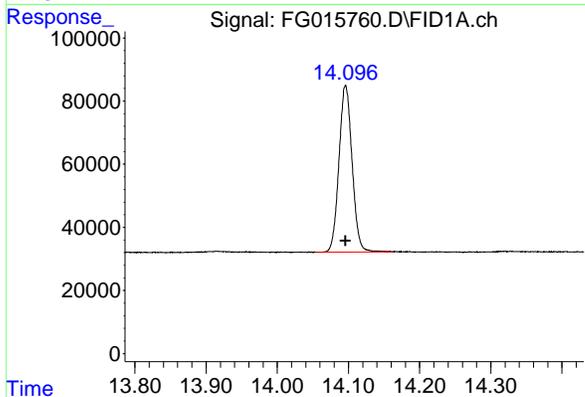
#6 N-OCTADECANE

R.T.: 11.581 min  
 Delta R.T.: 0.000 min  
 Response: 652759  
 Conc: 4.98 ug/ml



#7 N-EICOSANE

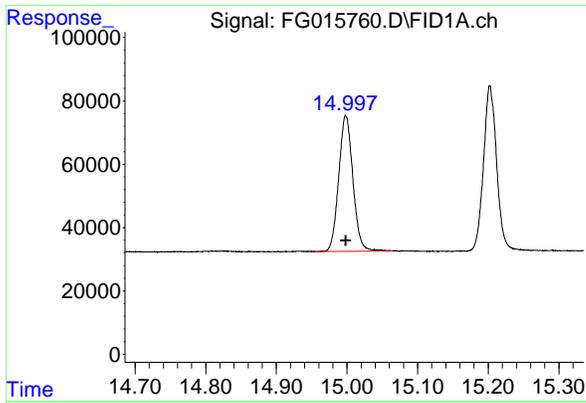
R.T.: 12.895 min  
 Delta R.T.: 0.000 min  
 Response: 691598  
 Conc: 5.10 ug/ml



#8 N-DOCOSANE

R.T.: 14.096 min  
 Delta R.T.: 0.000 min  
 Response: 675439  
 Conc: 5.09 ug/ml

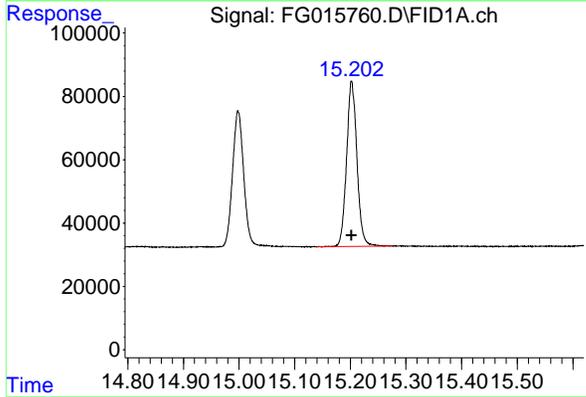
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#9 TETRACOSANE-d50 (SURROGATE)

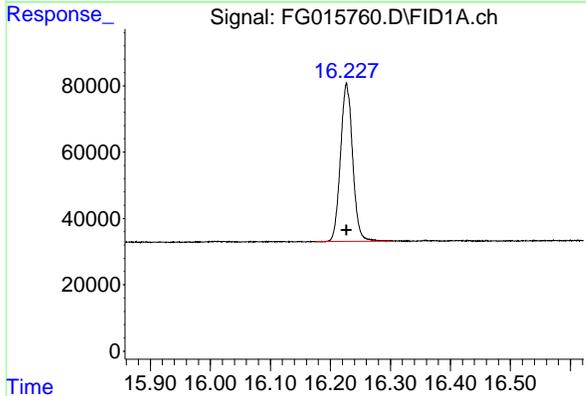
R.T.: 14.998 min  
 Delta R.T.: 0.000 min  
 Response: 597973  
 Conc: 5.08 ug/ml

Instrument :  
 FID\_G  
 ClientSampleId :  
 5 TRPH STD



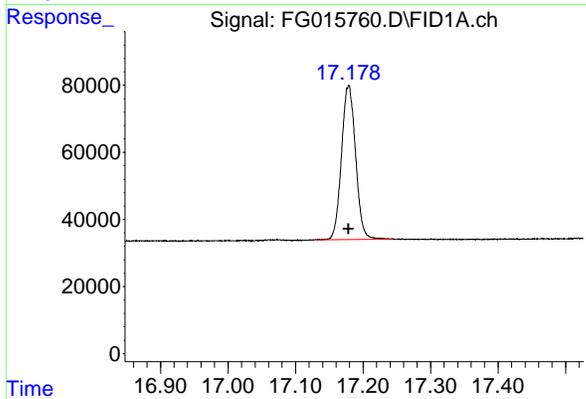
#10 N-TETRACOSANE

R.T.: 15.202 min  
 Delta R.T.: 0.000 min  
 Response: 676031  
 Conc: 5.09 ug/ml



#11 N-HEXACOSANE

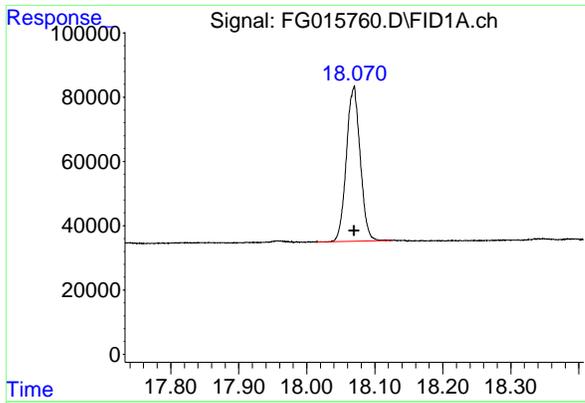
R.T.: 16.227 min  
 Delta R.T.: 0.000 min  
 Response: 669566  
 Conc: 5.05 ug/ml



#12 N-OCTACOSANE

R.T.: 17.179 min  
 Delta R.T.: 0.000 min  
 Response: 665315  
 Conc: 5.05 ug/ml

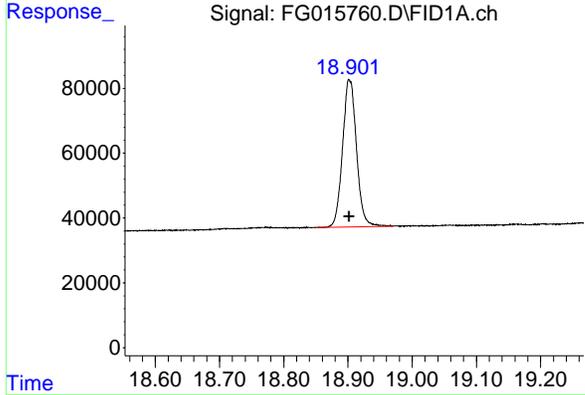
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#13 N-TRIACONTANE

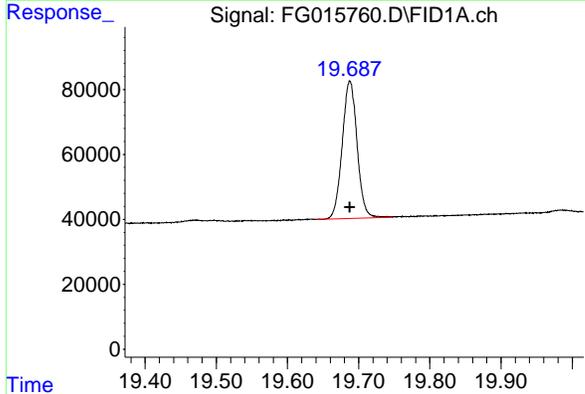
R.T.: 18.069 min  
Delta R.T.: 0.000 min  
Response: 677422  
Conc: 5.08 ug/ml

Instrument : FID\_G  
ClientSampleId : 5 TRPH STD



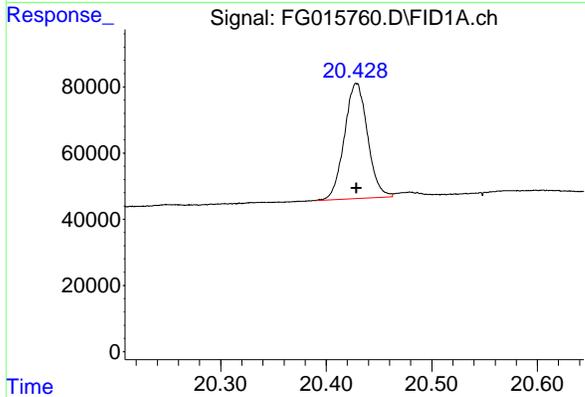
#14 N-DOTRIACONTANE

R.T.: 18.902 min  
Delta R.T.: 0.000 min  
Response: 685497  
Conc: 5.20 ug/ml



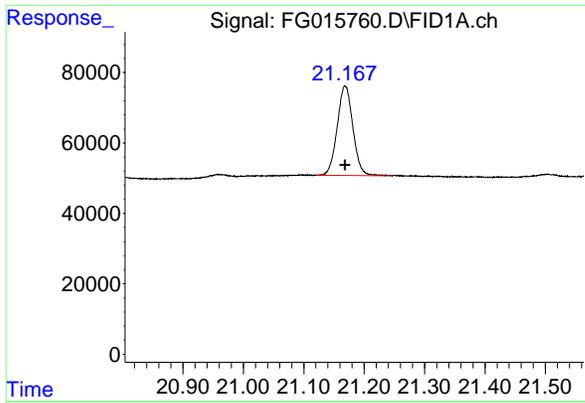
#15 N-TETRATRIACONTANE

R.T.: 19.688 min  
Delta R.T.: 0.000 min  
Response: 612187  
Conc: 5.06 ug/ml



#16 N-HEXATRIACONTANE

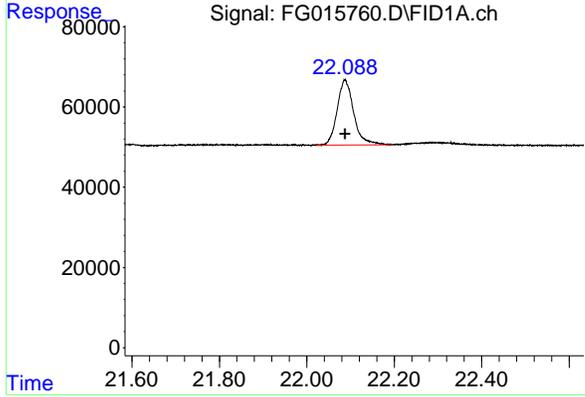
R.T.: 20.429 min  
Delta R.T.: 0.000 min  
Response: 531350  
Conc: 4.96 ug/ml



#17 N-OCTATRIACONTANE

R.T.: 21.169 min  
 Delta R.T.: 0.000 min  
 Response: 459713  
 Conc: 4.77 ug/ml

Instrument : FID\_G  
 ClientSampleId : 5 TRPH STD



#18 N-TETRACONTANE

R.T.: 22.088 min  
 Delta R.T.: 0.000 min  
 Response: 425456  
 Conc: 4.78 ug/ml

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Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG042425\  
 Data File : FG015760.D  
 Signal(s) : FID1A.ch  
 Acq On : 24 Apr 2025 12:45  
 Sample : 5 TRPH STD  
 Misc :  
 ALS Vial : 75 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
 Title :

Signal : FID1A.ch

| peak #                  | R. T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|-------------------------|-----------|-----------|---------|-------|-------------|-----------|-------------|------------|
| 1                       | 1.977     | 1.939     | 2.061   | BB    | 47137       | 551237    | 79.70%      | 5.121%     |
| 2                       | 4.503     | 4.465     | 4.589   | BB    | 43181       | 509093    | 73.61%      | 4.729%     |
| 3                       | 6.684     | 6.649     | 6.780   | BB    | 39956       | 507207    | 73.34%      | 4.712%     |
| 4                       | 8.520     | 8.490     | 8.624   | BB    | 41407       | 571671    | 82.66%      | 5.311%     |
| 5                       | 10.135    | 10.101    | 10.243  | BB    | 42133       | 604971    | 87.47%      | 5.620%     |
| 6                       | 11.581    | 11.548    | 11.671  | BB    | 48580       | 652759    | 94.38%      | 6.064%     |
| 7                       | 12.895    | 12.862    | 12.970  | BB    | 54237       | 691598    | 100.00%     | 6.425%     |
| 8                       | 14.096    | 14.055    | 14.162  | BB    | 52891       | 675439    | 97.66%      | 6.275%     |
| 9                       | 14.998    | 14.956    | 15.065  | BB    | 42665       | 597973    | 86.46%      | 5.555%     |
| 10                      | 15.202    | 15.139    | 15.276  | BB    | 52148       | 676031    | 97.75%      | 6.280%     |
| 11                      | 16.227    | 16.176    | 16.304  | BB    | 47808       | 669566    | 96.81%      | 6.220%     |
| 12                      | 17.179    | 17.130    | 17.244  | BB    | 45997       | 665315    | 96.20%      | 6.181%     |
| 13                      | 18.069    | 18.014    | 18.126  | BB    | 47882       | 677422    | 97.95%      | 6.293%     |
| 14                      | 18.902    | 18.850    | 18.970  | BB    | 45364       | 685497    | 99.12%      | 6.368%     |
| 15                      | 19.688    | 19.640    | 19.748  | BB    | 42275       | 612187    | 88.52%      | 5.687%     |
| 16                      | 20.429    | 20.390    | 20.463  | BV    | 34740       | 531350    | 76.83%      | 4.936%     |
| 17                      | 21.169    | 21.120    | 21.247  | BB    | 25451       | 459713    | 66.47%      | 4.271%     |
| 18                      | 22.088    | 22.021    | 22.196  | BB    | 16340       | 425456    | 61.52%      | 3.952%     |
| Sum of corrected areas: |           |           |         |       |             | 10764484  |             |            |

FG042425.M Thu Apr 24 13:19:16 2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG042425\  
 Data File : FG015761.D  
 Signal(s) : FID1A.ch  
 Acq On : 24 Apr 2025 13:14  
 Operator : YP\AJ  
 Sample : FG042225ICV  
 Misc :  
 ALS Vial : 76 Sample Multiplier: 1

Instrument :  
 FID\_G  
 ClientSampleId :  
 FG042225ICV

Integration File: autoint1.e  
 Quant Time: Apr 24 13:22:12 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
 Quant Title :  
 QLast Update : Thu Apr 24 12:54:09 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

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

| Compound                      | R.T.   | Response | Conc Units   |
|-------------------------------|--------|----------|--------------|
| -----                         |        |          |              |
| System Monitoring Compounds   |        |          |              |
| 9) S TETRACOSANE-d50 (SURR... | 15.002 | 5703592  | 48.444 ug/ml |
| Target Compounds              |        |          |              |
| 1) N-OCTANE                   | 1.974  | 5510430  | 48.896 ug/ml |
| 2) N-DECANE                   | 4.503  | 5641970  | 50.676 ug/ml |
| 3) N-DODECANE                 | 6.686  | 5866110  | 51.187 ug/ml |
| 4) N-TETRADECANE              | 8.522  | 6094657  | 50.297 ug/ml |
| 5) N-HEXADECANE               | 10.136 | 6265761  | 49.909 ug/ml |
| 6) N-OCTADECANE               | 11.584 | 6463057  | 49.317 ug/ml |
| 7) N-EICOSANE                 | 12.898 | 6595058  | 48.645 ug/ml |
| 8) N-DOCOSANE                 | 14.101 | 6445107  | 48.595 ug/ml |
| 10) N-TETRACOSANE             | 15.207 | 6455131  | 48.576 ug/ml |
| 11) N-HEXACOSANE              | 16.231 | 6437369  | 48.540 ug/ml |
| 12) N-OCTACOSANE              | 17.184 | 6356430  | 48.215 ug/ml |
| 13) N-TRIACONTANE             | 18.074 | 6379777  | 47.853 ug/ml |
| 14) N-DOTRIACONTANE           | 18.907 | 6133852  | 46.529 ug/ml |
| 15) N-TETRATRIACONTANE        | 19.693 | 5542426  | 45.829 ug/ml |
| 16) N-HEXATRIACONTANE         | 20.432 | 4717169  | 43.996 ug/ml |
| 17) N-OCTATRIACONTANE         | 21.170 | 4060290  | 42.150 ug/ml |
| 18) N-TETRACONTANE            | 22.087 | 3600811  | 40.438 ug/ml |
| -----                         |        |          |              |

(f)=RT Delta > 1/2 Window

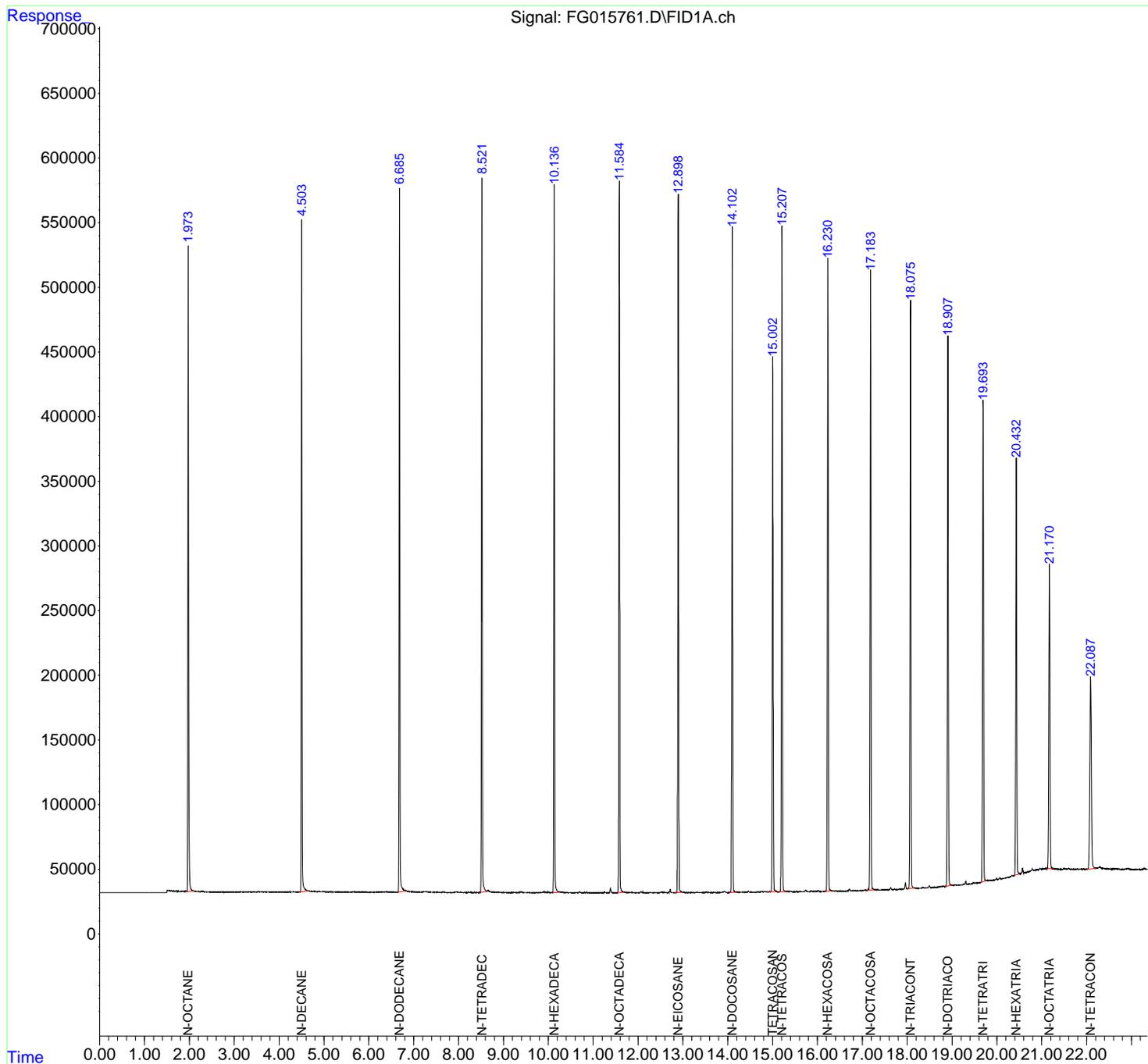
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG042425\  
 Data File : FG015761.D  
 Signal(s) : FID1A.ch  
 Acq On : 24 Apr 2025 13:14  
 Operator : YP\AJ  
 Sample : FG042225ICV  
 Misc :  
 ALS Vial : 76 Sample Multiplier: 1

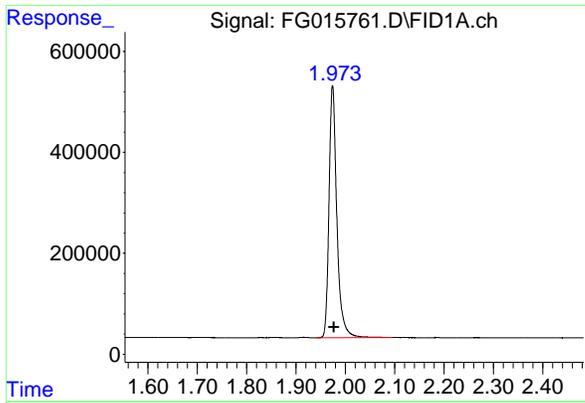
Instrument :  
 FID\_G  
 ClientSampleId :  
 FG042225ICV

Integration File: autoint1.e  
 Quant Time: Apr 24 13:22:12 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
 Quant Title :  
 QLast Update : Thu Apr 24 12:54:09 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

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



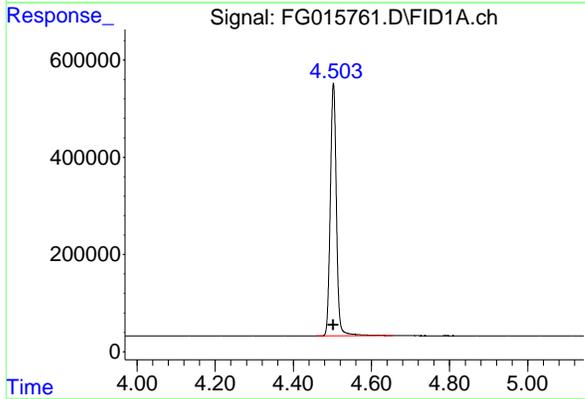
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#1 N-OCTANE

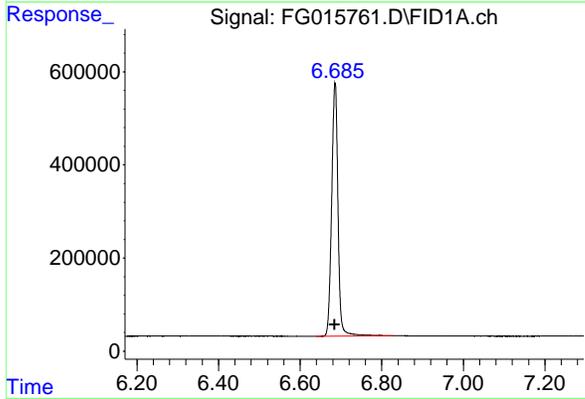
R.T.: 1.974 min  
Delta R.T.: -0.003 min  
Response: 5510430  
Conc: 48.90 ug/ml

Instrument :  
FID\_G  
ClientSampleId :  
FG042225ICV



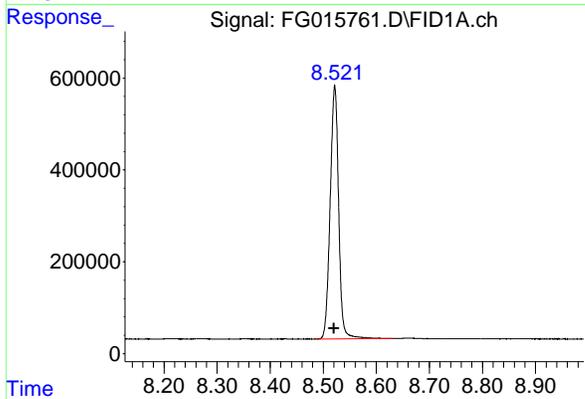
#2 N-DECANE

R.T.: 4.503 min  
Delta R.T.: 0.000 min  
Response: 5641970  
Conc: 50.68 ug/ml



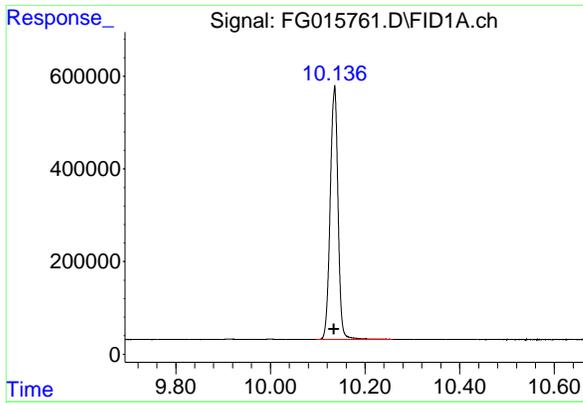
#3 N-DODECANE

R.T.: 6.686 min  
Delta R.T.: 0.001 min  
Response: 5866110  
Conc: 51.19 ug/ml



#4 N-TETRADECANE

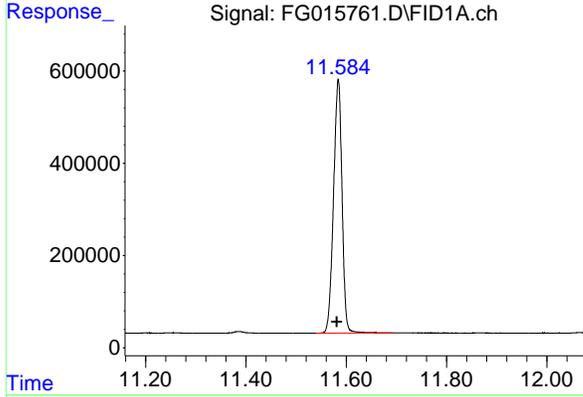
R.T.: 8.522 min  
Delta R.T.: 0.001 min  
Response: 6094657  
Conc: 50.30 ug/ml



#5 N-HEXADECANE

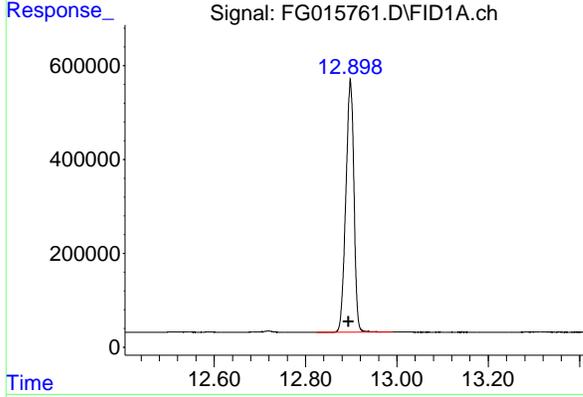
R.T.: 10.136 min  
 Delta R.T.: 0.001 min  
 Response: 6265761  
 Conc: 49.91 ug/ml

Instrument : FID\_G  
 ClientSampleId : FG042225ICV



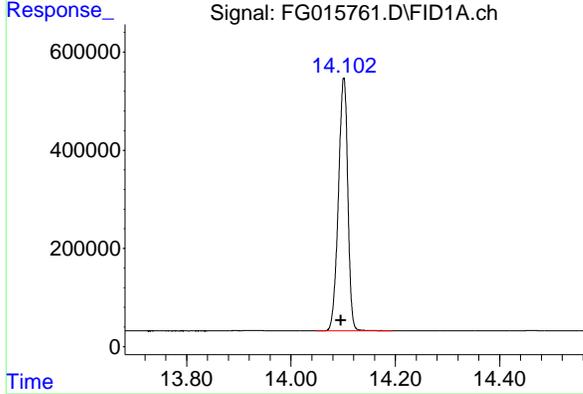
#6 N-OCTADECANE

R.T.: 11.584 min  
 Delta R.T.: 0.003 min  
 Response: 6463057  
 Conc: 49.32 ug/ml



#7 N-EICOSANE

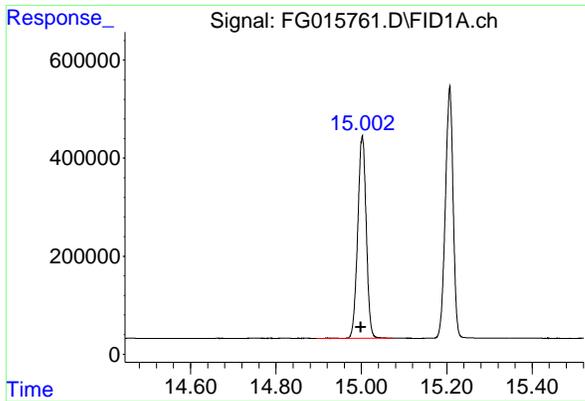
R.T.: 12.898 min  
 Delta R.T.: 0.004 min  
 Response: 6595058  
 Conc: 48.64 ug/ml



#8 N-DOCOSANE

R.T.: 14.101 min  
 Delta R.T.: 0.005 min  
 Response: 6445107  
 Conc: 48.59 ug/ml

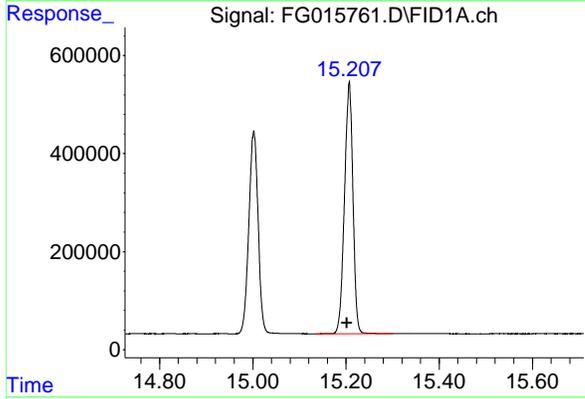
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#9 TETRACOSANE-d50 (SURROGATE)

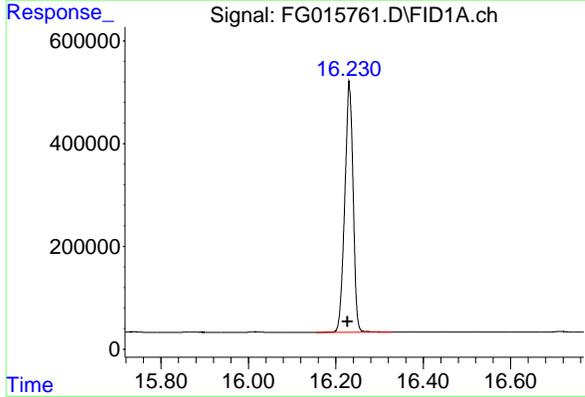
R.T.: 15.002 min  
Delta R.T.: 0.004 min  
Response: 5703592  
Conc: 48.44 ug/ml

Instrument :  
FID\_G  
ClientSampleId :  
FG042225ICV



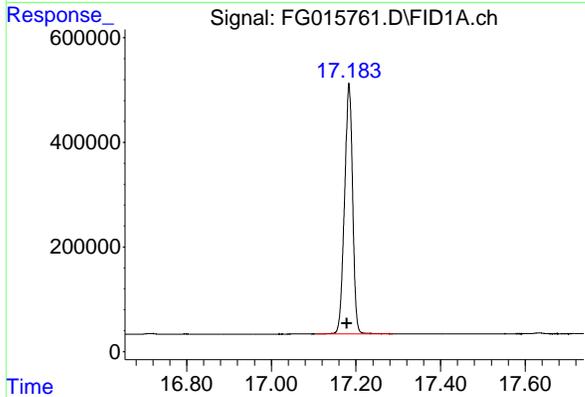
#10 N-TETRACOSANE

R.T.: 15.207 min  
Delta R.T.: 0.005 min  
Response: 6455131  
Conc: 48.58 ug/ml



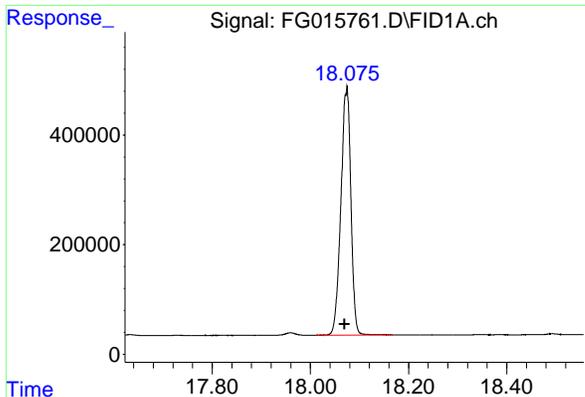
#11 N-HEXACOSANE

R.T.: 16.231 min  
Delta R.T.: 0.004 min  
Response: 6437369  
Conc: 48.54 ug/ml



#12 N-OCTACOSANE

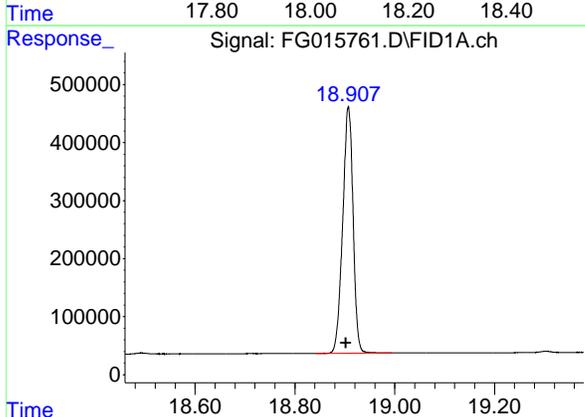
R.T.: 17.184 min  
Delta R.T.: 0.005 min  
Response: 6356430  
Conc: 48.22 ug/ml



#13 N-TRIACONTANE

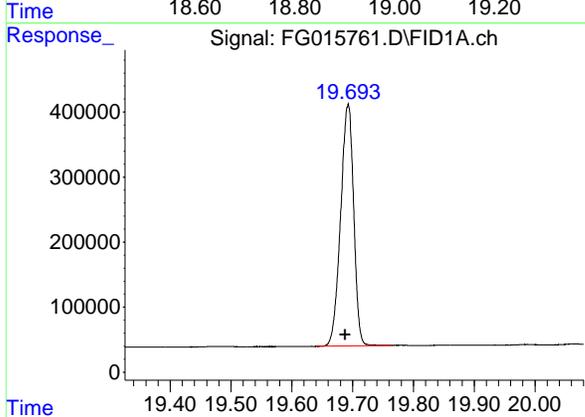
R.T.: 18.074 min  
Delta R.T.: 0.005 min  
Response: 6379777  
Conc: 47.85 ug/ml

Instrument : FID\_G  
Client Sample Id : FG042225ICV



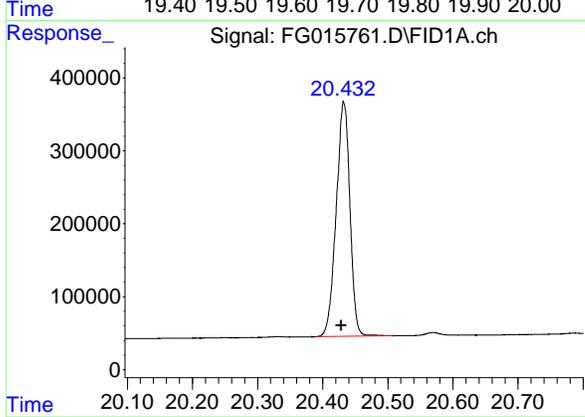
#14 N-DOTRIACONTANE

R.T.: 18.907 min  
Delta R.T.: 0.005 min  
Response: 6133852  
Conc: 46.53 ug/ml



#15 N-TETRATRIACONTANE

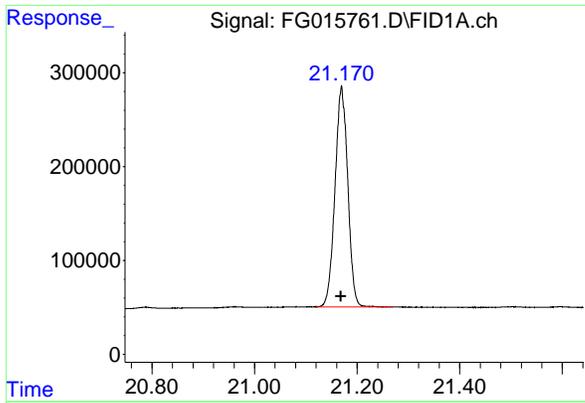
R.T.: 19.693 min  
Delta R.T.: 0.005 min  
Response: 5542426  
Conc: 45.83 ug/ml



#16 N-HEXATRIACONTANE

R.T.: 20.432 min  
Delta R.T.: 0.004 min  
Response: 4717169  
Conc: 44.00 ug/ml

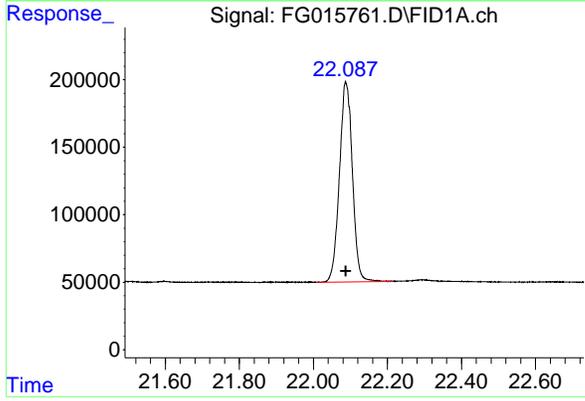
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#17 N-OCTATRIACONTANE

R.T.: 21.170 min  
Delta R.T.: 0.001 min  
Response: 4060290  
Conc: 42.15 ug/ml

Instrument :  
FID\_G  
ClientSampleId :  
FG042225ICV



#18 N-TETRACONTANE

R.T.: 22.087 min  
Delta R.T.: 0.000 min  
Response: 3600811  
Conc: 40.44 ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG042425\  
 Data File : FG015761.D  
 Signal(s) : FID1A.ch  
 Acq On : 24 Apr 2025 13:14  
 Sample : FG042225I CV  
 Misc :  
 ALS Vial : 76 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
 Title :

Signal : FID1A.ch

| peak #                  | R. T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|-------------------------|-----------|-----------|---------|-------|-------------|-----------|-------------|------------|
| 1                       | 1.974     | 1.941     | 2.096   | BB    | 498673      | 5510430   | 83.55%      | 5.285%     |
| 2                       | 4.503     | 4.458     | 4.654   | BB    | 519614      | 5641970   | 85.55%      | 5.411%     |
| 3                       | 6.686     | 6.639     | 6.827   | BB    | 542865      | 5866110   | 88.95%      | 5.626%     |
| 4                       | 8.522     | 8.487     | 8.631   | BV    | 551733      | 6094657   | 92.41%      | 5.845%     |
| 5                       | 10.136    | 10.097    | 10.258  | BB    | 545251      | 6265761   | 95.01%      | 6.009%     |
| 6                       | 11.584    | 11.540    | 11.693  | BB    | 548843      | 6463057   | 98.00%      | 6.198%     |
| 7                       | 12.898    | 12.823    | 12.991  | BB    | 538074      | 6595058   | 100.00%     | 6.325%     |
| 8                       | 14.101    | 14.048    | 14.195  | BB    | 513981      | 6445107   | 97.73%      | 6.181%     |
| 9                       | 15.002    | 14.894    | 15.073  | BV    | 414129      | 5703592   | 86.48%      | 5.470%     |
| 10                      | 15.207    | 15.136    | 15.300  | BB    | 515504      | 6455131   | 97.88%      | 6.191%     |
| 11                      | 16.231    | 16.155    | 16.330  | BB    | 485122      | 6437369   | 97.61%      | 6.174%     |
| 12                      | 17.184    | 17.106    | 17.287  | BB    | 479206      | 6356430   | 96.38%      | 6.096%     |
| 13                      | 18.074    | 18.012    | 18.168  | BB    | 447217      | 6379777   | 96.74%      | 6.119%     |
| 14                      | 18.907    | 18.843    | 18.996  | BB    | 423311      | 6133852   | 93.01%      | 5.883%     |
| 15                      | 19.693    | 19.640    | 19.766  | BB    | 371183      | 5542426   | 84.04%      | 5.316%     |
| 16                      | 20.432    | 20.390    | 20.508  | BB    | 321020      | 4717169   | 71.53%      | 4.524%     |
| 17                      | 21.170    | 21.120    | 21.269  | BB    | 234910      | 4060290   | 61.57%      | 3.894%     |
| 18                      | 22.087    | 22.008    | 22.214  | BB    | 148215      | 3600811   | 54.60%      | 3.453%     |
| Sum of corrected areas: |           |           |         |       |             | 104268994 |             |            |

FG042425.M Thu Apr 24 14:33:53 2025

**DIESEL RANGE ORGANICS CONTINUING CALIBRATION SUMMARY**

**50 PPM TRPH STD**

Lab Name: Chemtech Contract: ALLI03  
 ProjectID: NJ Soil PT  
 Lab Code: CHEM Case No.: Q1872 SAS No.: Q1872 SDG No.: Q1872  
 DataFile: FG015818.D Analyst Name: YP\AJ Analyst Date: 05-13-2025

| Conc. (PPM) | Area Count | RF     | Average RF | %D    |
|-------------|------------|--------|------------|-------|
| 500         | 60476877   | 120954 | 126925     | 4.704 |

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Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG051325\  
 Data File : FG015818.D  
 Signal(s) : FID1A.ch  
 Acq On : 13 May 2025 11:40  
 Operator : YP\AJ  
 Sample : 50 PPM TRPH STD  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 FID\_G  
 ClientSampleId :  
 50 PPM TRPH STD

Integration File: autoint1.e  
 Quant Time: May 14 03:54:24 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
 Quant Title :  
 QLast Update : Thu Apr 24 12:54:09 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

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

| Compound                      | R.T.   | Response | Conc Units   |
|-------------------------------|--------|----------|--------------|
| -----                         |        |          |              |
| System Monitoring Compounds   |        |          |              |
| 9) S TETRACOSANE-d50 (SURR... | 14.998 | 5482459  | 46.565 ug/ml |
| Target Compounds              |        |          |              |
| 2) N-DECANE                   | 4.499  | 5351365  | 48.066 ug/ml |
| 3) N-DODECANE                 | 6.681  | 5643937  | 49.248 ug/ml |
| 4) N-TETRADECANE              | 8.517  | 5889484  | 48.604 ug/ml |
| 5) N-HEXADECANE               | 10.131 | 6050592  | 48.196 ug/ml |
| 6) N-OCTADECANE               | 11.579 | 6240717  | 47.620 ug/ml |
| 7) N-EICOSANE                 | 12.895 | 6359506  | 46.907 ug/ml |
| 8) N-DOCOSANE                 | 14.097 | 6209146  | 46.816 ug/ml |
| 10) N-TETRACOSANE             | 15.204 | 6232751  | 46.903 ug/ml |
| 11) N-HEXACOSANE              | 16.228 | 6221359  | 46.911 ug/ml |
| 12) N-OCTACOSANE              | 17.181 | 6278020  | 47.621 ug/ml |
| -----                         |        |          |              |

(f)=RT Delta > 1/2 Window

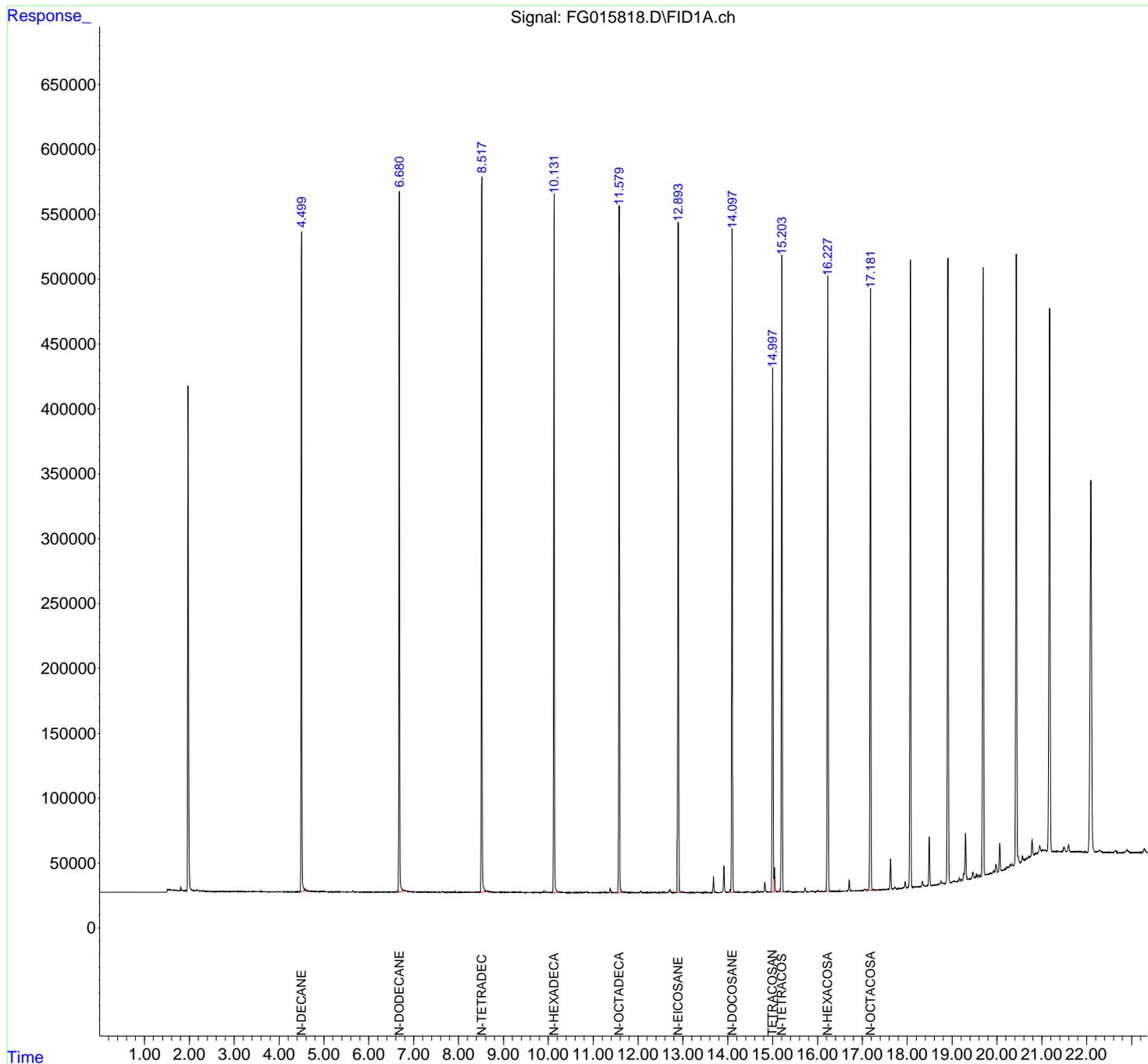
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG051325\  
 Data File : FG015818.D  
 Signal(s) : FID1A.ch  
 Acq On : 13 May 2025 11:40  
 Operator : YP\AJ  
 Sample : 50 PPM TRPH STD  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

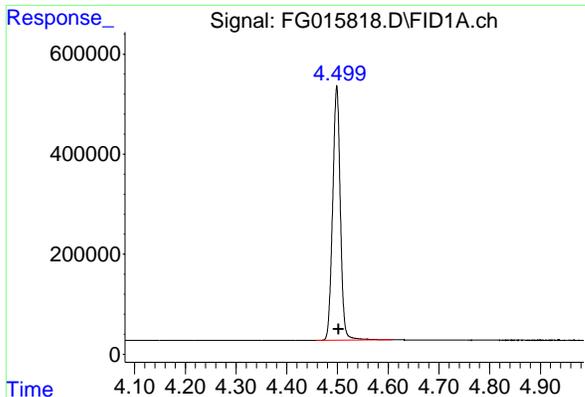
Instrument :  
 FID\_G  
 ClientSampleId :  
 50 PPM TRPH STD

Integration File: autoint1.e  
 Quant Time: May 14 03:54:24 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
 Quant Title :  
 QLast Update : Thu Apr 24 12:54:09 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

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



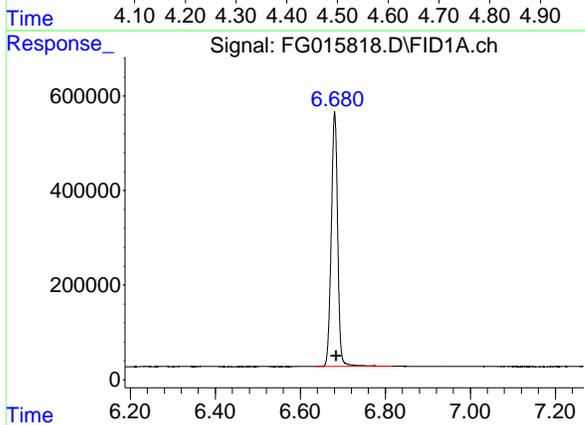
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#2 N-DECANE

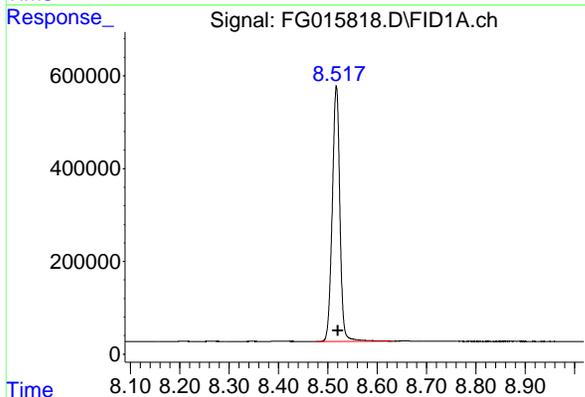
R.T.: 4.499 min  
Delta R.T.: -0.004 min  
Response: 5351365  
Conc: 48.07 ug/ml

Instrument : FID\_G  
ClientSampleId : 50 PPM TRPH STD



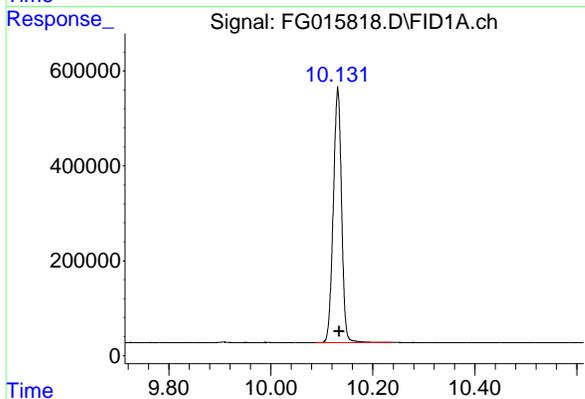
#3 N-DODECANE

R.T.: 6.681 min  
Delta R.T.: -0.003 min  
Response: 5643937  
Conc: 49.25 ug/ml



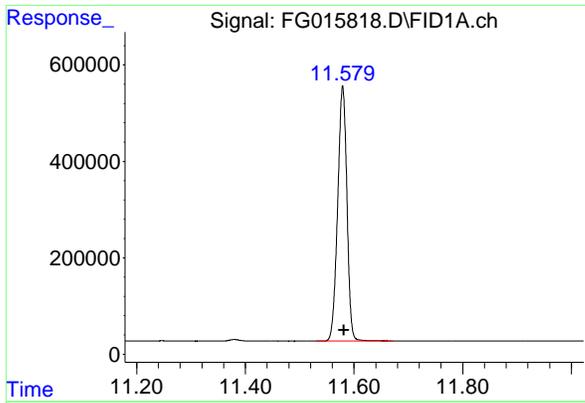
#4 N-TETRADECANE

R.T.: 8.517 min  
Delta R.T.: -0.003 min  
Response: 5889484  
Conc: 48.60 ug/ml



#5 N-HEXADECANE

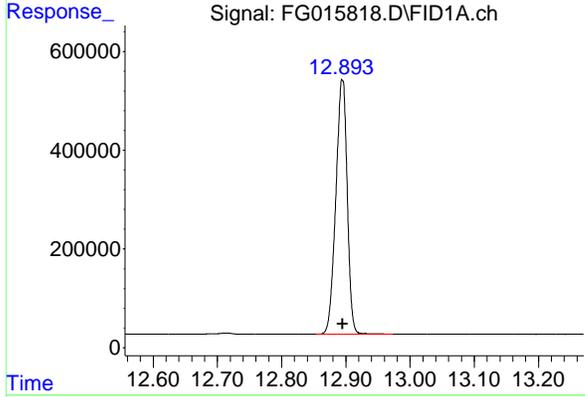
R.T.: 10.131 min  
Delta R.T.: -0.003 min  
Response: 6050592  
Conc: 48.20 ug/ml



#6 N-OCTADECANE

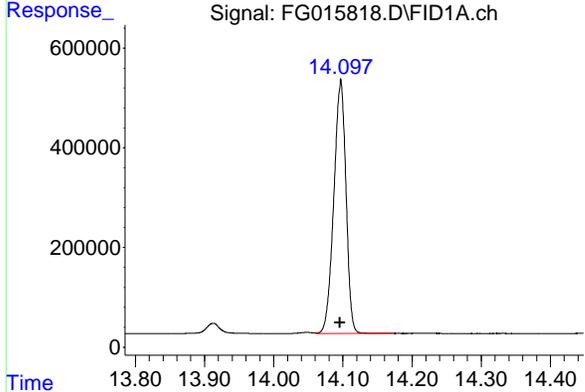
R.T.: 11.579 min  
Delta R.T.: -0.002 min  
Response: 6240717  
Conc: 47.62 ug/ml

Instrument : FID\_G  
ClientSampleId : 50 PPM TRPH STD



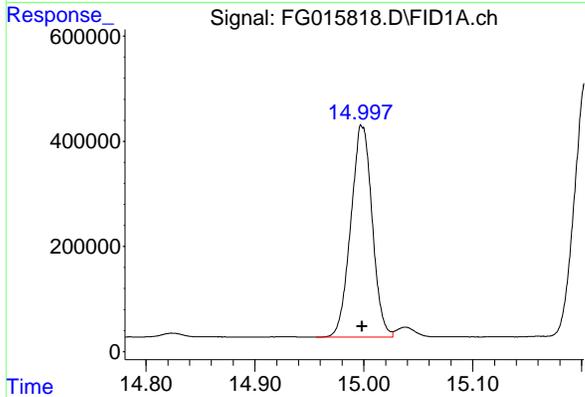
#7 N-EICOSANE

R.T.: 12.895 min  
Delta R.T.: 0.000 min  
Response: 6359506  
Conc: 46.91 ug/ml



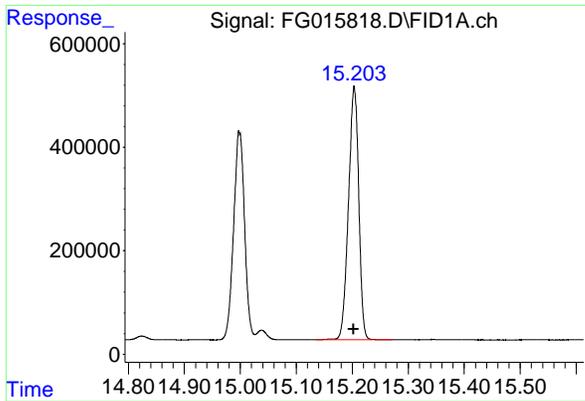
#8 N-DOCOSANE

R.T.: 14.097 min  
Delta R.T.: 0.001 min  
Response: 6209146  
Conc: 46.82 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

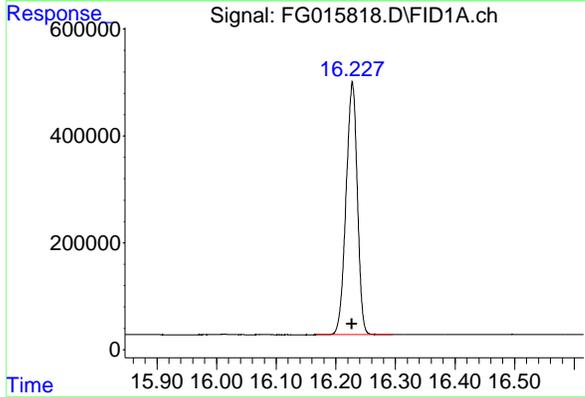
R.T.: 14.998 min  
Delta R.T.: 0.000 min  
Response: 5482459  
Conc: 46.57 ug/ml



#10 N-TETRACOSANE

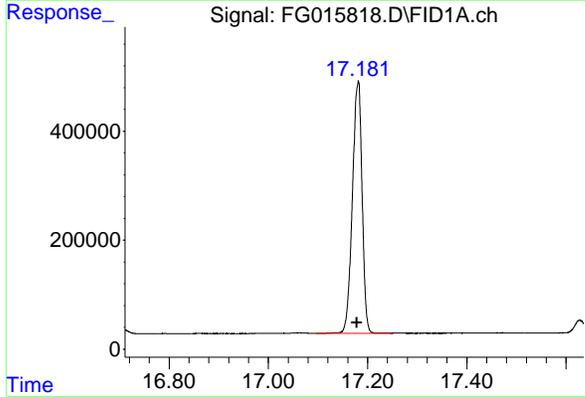
R.T.: 15.204 min  
Delta R.T.: 0.001 min  
Response: 6232751  
Conc: 46.90 ug/ml

Instrument : FID\_G  
ClientSampleId : 50 PPM TRPH STD



#11 N-HEXACOSANE

R.T.: 16.228 min  
Delta R.T.: 0.001 min  
Response: 6221359  
Conc: 46.91 ug/ml



#12 N-OCTACOSANE

R.T.: 17.181 min  
Delta R.T.: 0.002 min  
Response: 6278020  
Conc: 47.62 ug/ml

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Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG051325\  
 Data File : FG015818.D  
 Signal(s) : FID1A.ch  
 Acq On : 13 May 2025 11:40  
 Sample : 50 PPM TRPH STD  
 Mi sc :  
 ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
 Title :

Signal : FID1A.ch

| peak #                  | R. T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|-------------------------|-----------|-----------|---------|-------|-------------|-----------|-------------|------------|
| 1                       | 4.499     | 4.458     | 4.609   | BB    | 508368      | 5351365   | 84.15%      | 8.113%     |
| 2                       | 6.681     | 6.637     | 6.817   | BB    | 538048      | 5643937   | 88.75%      | 8.557%     |
| 3                       | 8.517     | 8.476     | 8.631   | BV    | 550429      | 5889484   | 92.61%      | 8.929%     |
| 4                       | 10.131    | 10.089    | 10.239  | BB    | 536692      | 6050592   | 95.14%      | 9.173%     |
| 5                       | 11.579    | 11.530    | 11.671  | BB    | 529210      | 6240717   | 98.13%      | 9.461%     |
| 6                       | 12.895    | 12.854    | 12.973  | BB    | 514140      | 6359506   | 100.00%     | 9.642%     |
| 7                       | 14.097    | 14.061    | 14.172  | VB    | 510628      | 6209146   | 97.64%      | 9.414%     |
| 8                       | 14.998    | 14.956    | 15.026  | BV    | 398999      | 5482459   | 86.21%      | 8.312%     |
| 9                       | 15.204    | 15.135    | 15.272  | BB    | 489489      | 6232751   | 98.01%      | 9.449%     |
| 10                      | 16.228    | 16.167    | 16.295  | BB    | 472998      | 6221359   | 97.83%      | 9.432%     |
| 11                      | 17.181    | 17.096    | 17.250  | BB    | 462352      | 6278020   | 98.72%      | 9.518%     |
| Sum of corrected areas: |           |           |         |       |             | 65959334  |             |            |

FG042425.M Wed May 14 05:05:25 2025

**DIESEL RANGE ORGANICS CONTINUING CALIBRATION SUMMARY**

**50 PPM TRPH STD**

Lab Name: Chemtech Contract: ALLI03  
 ProjectID: NJ Soil PT  
 Lab Code: CHEM Case No.: Q1872 SAS No.: Q1872 SDG No.: Q1872  
 DataFile: FG015825.D Analyst Name: YP\AJ Analyst Date: 05-13-2025

| Conc. (PPM) | Area Count | RF     | Average RF | %D    |
|-------------|------------|--------|------------|-------|
| 500         | 62796625   | 125593 | 126925     | 1.049 |

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Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG051325\  
 Data File : FG015825.D  
 Signal(s) : FID1A.ch  
 Acq On : 13 May 2025 16:53  
 Operator : YP\AJ  
 Sample : 50 PPM TRPH STD  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 FID\_G  
 ClientSampleId :  
 50 PPM TRPH STD

Integration File: autoint1.e  
 Quant Time: May 14 03:55:35 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
 Quant Title :  
 QLast Update : Thu Apr 24 12:54:09 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

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

| Compound                      | R.T.   | Response | Conc Units   |
|-------------------------------|--------|----------|--------------|
| -----                         |        |          |              |
| System Monitoring Compounds   |        |          |              |
| 9) S TETRACOSANE-d50 (SURR... | 14.998 | 5659391  | 48.068 ug/ml |
| Target Compounds              |        |          |              |
| 2) N-DECANE                   | 4.497  | 5569282  | 50.023 ug/ml |
| 3) N-DODECANE                 | 6.680  | 5878120  | 51.292 ug/ml |
| 4) N-TETRADECANE              | 8.517  | 6151100  | 50.763 ug/ml |
| 5) N-HEXADECANE               | 10.131 | 6321600  | 50.354 ug/ml |
| 6) N-OCTADECANE               | 11.579 | 6510234  | 49.677 ug/ml |
| 7) N-EICOSANE                 | 12.893 | 6615705  | 48.797 ug/ml |
| 8) N-DOCOSANE                 | 14.095 | 6437736  | 48.539 ug/ml |
| 10) N-TETRACOSANE             | 15.202 | 6444515  | 48.496 ug/ml |
| 11) N-HEXACOSANE              | 16.226 | 6411471  | 48.345 ug/ml |
| 12) N-OCTACOSANE              | 17.178 | 6456862  | 48.977 ug/ml |

(f)=RT Delta > 1/2 Window

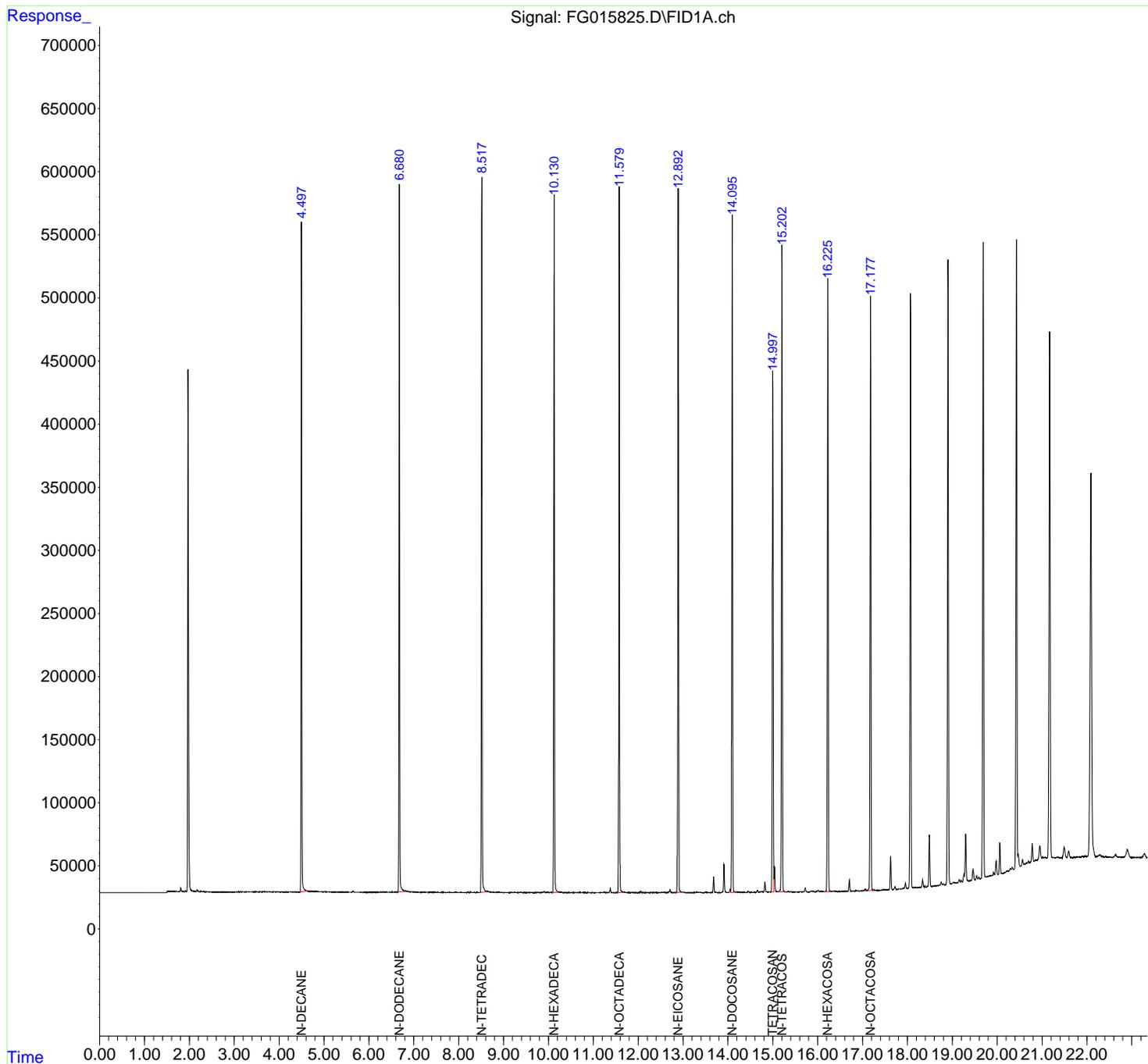
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG051325\  
 Data File : FG015825.D  
 Signal(s) : FID1A.ch  
 Acq On : 13 May 2025 16:53  
 Operator : YP\AJ  
 Sample : 50 PPM TRPH STD  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

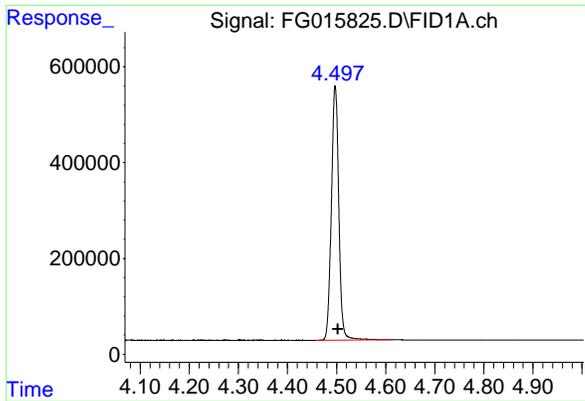
Instrument :  
 FID\_G  
 ClientSampleId :  
 50 PPM TRPH STD

Integration File: autoint1.e  
 Quant Time: May 14 03:55:35 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
 Quant Title :  
 QLast Update : Thu Apr 24 12:54:09 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

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



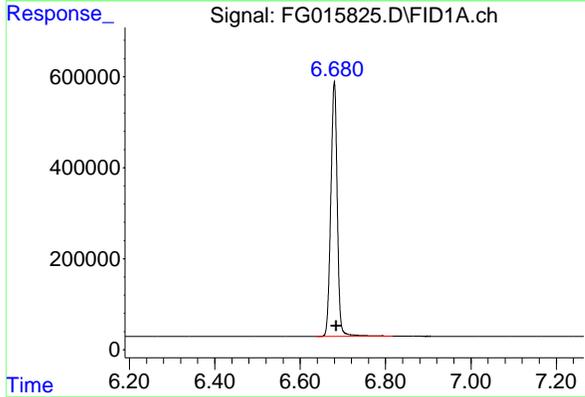
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#2 N-DECANE

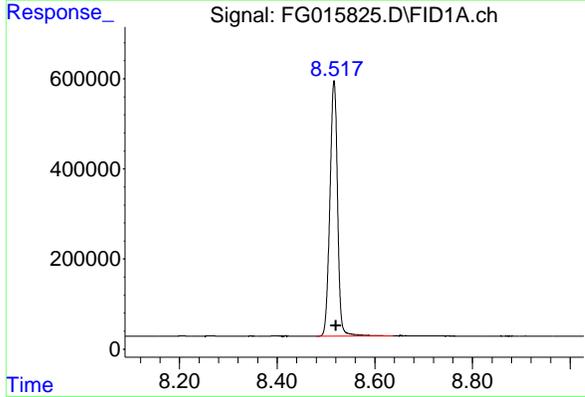
R.T.: 4.497 min  
 Delta R.T.: -0.005 min  
 Response: 5569282  
 Conc: 50.02 ug/ml

Instrument : FID\_G  
 ClientSampleId : 50 PPM TRPH STD



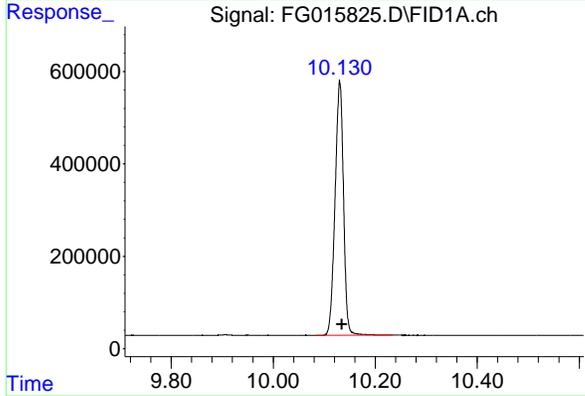
#3 N-DODECANE

R.T.: 6.680 min  
 Delta R.T.: -0.004 min  
 Response: 5878120  
 Conc: 51.29 ug/ml



#4 N-TETRADECANE

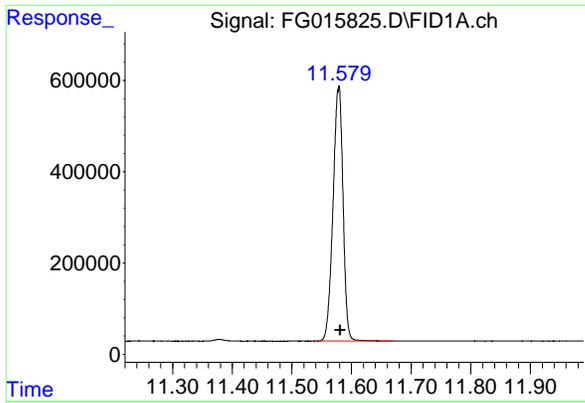
R.T.: 8.517 min  
 Delta R.T.: -0.004 min  
 Response: 6151100  
 Conc: 50.76 ug/ml



#5 N-HEXADECANE

R.T.: 10.131 min  
 Delta R.T.: -0.004 min  
 Response: 6321600  
 Conc: 50.35 ug/ml

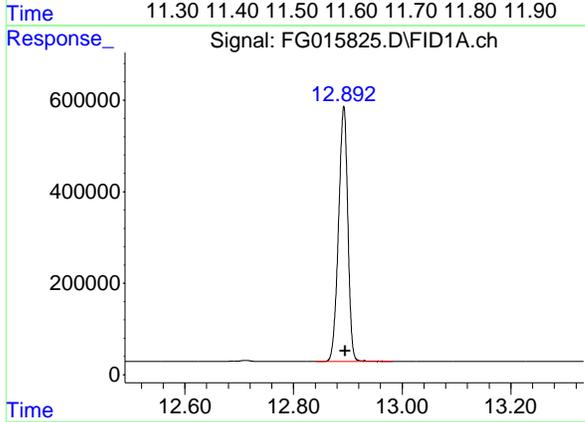
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#6 N-OCTADECANE

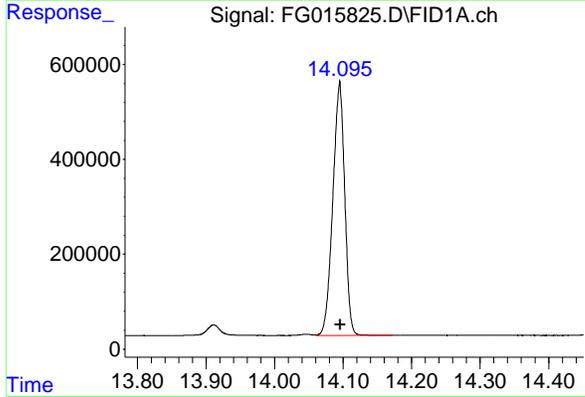
R.T.: 11.579 min  
 Delta R.T.: -0.003 min  
 Response: 6510234  
 Conc: 49.68 ug/ml

Instrument : FID\_G  
 ClientSampleId : 50 PPM TRPH STD



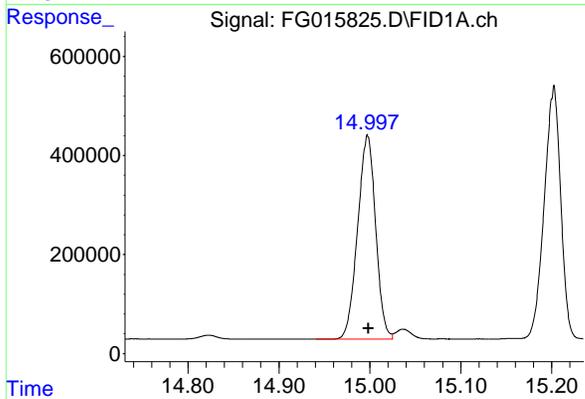
#7 N-EICOSANE

R.T.: 12.893 min  
 Delta R.T.: -0.002 min  
 Response: 6615705  
 Conc: 48.80 ug/ml



#8 N-DOCOSANE

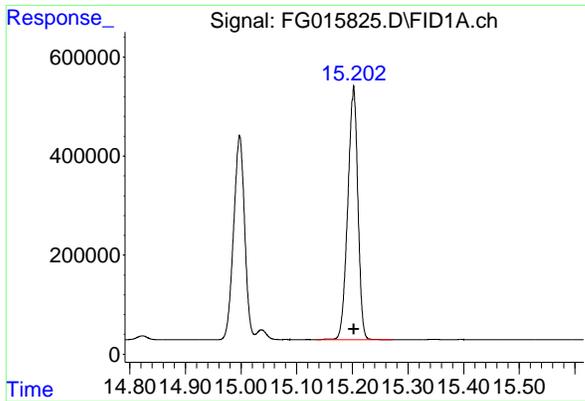
R.T.: 14.095 min  
 Delta R.T.: 0.000 min  
 Response: 6437736  
 Conc: 48.54 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 14.998 min  
 Delta R.T.: 0.000 min  
 Response: 5659391  
 Conc: 48.07 ug/ml

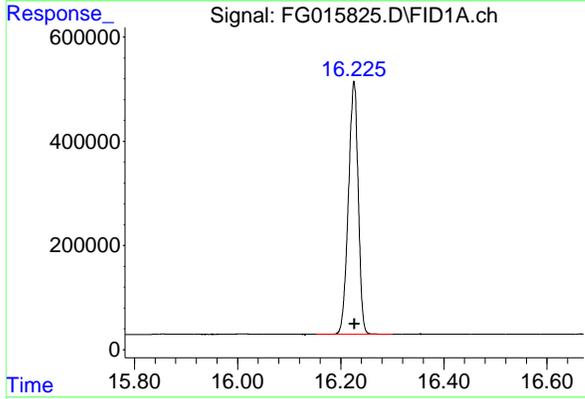
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#10 N-TETRACOSANE

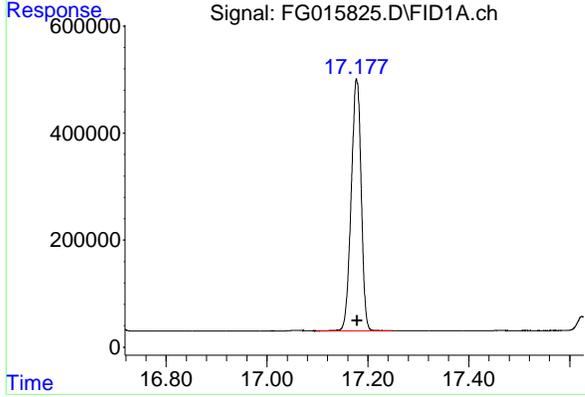
R.T.: 15.202 min  
 Delta R.T.: 0.000 min  
 Response: 6444515  
 Conc: 48.50 ug/ml

Instrument : FID\_G  
 ClientSampleId : 50 PPM TRPH STD



#11 N-HEXACOSANE

R.T.: 16.226 min  
 Delta R.T.: 0.000 min  
 Response: 6411471  
 Conc: 48.34 ug/ml



#12 N-OCTACOSANE

R.T.: 17.178 min  
 Delta R.T.: 0.000 min  
 Response: 6456862  
 Conc: 48.98 ug/ml

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Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG051325\  
 Data File : FG015825.D  
 Signal(s) : FID1A.ch  
 Acq On : 13 May 2025 16:53  
 Sample : 50 PPM TRPH STD  
 Mi sc :  
 ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
 Title :

Signal : FID1A.ch

| peak #                  | R. T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|-------------------------|-----------|-----------|---------|-------|-------------|-----------|-------------|------------|
| 1                       | 4.497     | 4.458     | 4.614   | BB    | 530200      | 5569282   | 84.18%      | 8.136%     |
| 2                       | 6.680     | 6.638     | 6.817   | BB    | 559379      | 5878120   | 88.85%      | 8.587%     |
| 3                       | 8.517     | 8.480     | 8.637   | BV    | 566587      | 6151100   | 92.98%      | 8.985%     |
| 4                       | 10.131    | 10.084    | 10.234  | BB    | 547795      | 6321600   | 95.55%      | 9.235%     |
| 5                       | 11.579    | 11.541    | 11.669  | BB    | 555154      | 6510234   | 98.41%      | 9.510%     |
| 6                       | 12.893    | 12.842    | 12.983  | BB    | 557804      | 6615705   | 100.00%     | 9.664%     |
| 7                       | 14.095    | 14.061    | 14.173  | VB    | 534342      | 6437736   | 97.31%      | 9.404%     |
| 8                       | 14.998    | 14.941    | 15.025  | BV    | 411404      | 5659391   | 85.54%      | 8.267%     |
| 9                       | 15.202    | 15.135    | 15.273  | BB    | 512339      | 6444515   | 97.41%      | 9.414%     |
| 10                      | 16.226    | 16.153    | 16.301  | BB    | 484679      | 6411471   | 96.91%      | 9.366%     |
| 11                      | 17.178    | 17.098    | 17.249  | BB    | 469809      | 6456862   | 97.60%      | 9.432%     |
| Sum of corrected areas: |           |           |         |       |             | 68456017  |             |            |

FG042425.M Wed May 14 05:09:13 2025

**DIESEL RANGE ORGANICS CONTINUING CALIBRATION SUMMARY**

**50 PPM TRPH STD**

Lab Name: Chemtech Contract: ALLI03  
 ProjectID: NJ Soil PT  
 Lab Code: CHEM Case No.: Q1872 SAS No.: Q1872 SDG No.: Q1872  
 DataFile: FG015835.D Analyst Name: YP\AJ Analyst Date: 05-13-2025

| Conc. (PPM) | Area Count | RF     | Average RF | %D    |
|-------------|------------|--------|------------|-------|
| 500         | 63457844   | 126916 | 126925     | 0.007 |

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Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG051325\  
 Data File : FG015835.D  
 Signal(s) : FID1A.ch  
 Acq On : 13 May 2025 21:46  
 Operator : YP\AJ  
 Sample : 50 PPM TRPH STD  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 FID\_G  
 ClientSampleId :  
 50 PPM TRPH STD

Integration File: autoint1.e  
 Quant Time: May 14 03:57:15 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
 Quant Title :  
 QLast Update : Thu Apr 24 12:54:09 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

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

| Compound                      | R.T.   | Response | Conc Units   |
|-------------------------------|--------|----------|--------------|
| -----                         |        |          |              |
| System Monitoring Compounds   |        |          |              |
| 9) S TETRACOSANE-d50 (SURR... | 14.996 | 5710489  | 48.502 ug/ml |
| Target Compounds              |        |          |              |
| 2) N-DECANE                   | 4.497  | 5691010  | 51.117 ug/ml |
| 3) N-DODECANE                 | 6.679  | 5974108  | 52.129 ug/ml |
| 4) N-TETRADECANE              | 8.516  | 6207700  | 51.230 ug/ml |
| 5) N-HEXADECANE               | 10.129 | 6361678  | 50.674 ug/ml |
| 6) N-OCTADECANE               | 11.578 | 6549621  | 49.977 ug/ml |
| 7) N-EICOSANE                 | 12.892 | 6656888  | 49.101 ug/ml |
| 8) N-DOCOSANE                 | 14.094 | 6494017  | 48.964 ug/ml |
| 10) N-TETRACOSANE             | 15.201 | 6515965  | 49.034 ug/ml |
| 11) N-HEXACOSANE              | 16.225 | 6479146  | 48.855 ug/ml |
| 12) N-OCTACOSANE              | 17.177 | 6527711  | 49.515 ug/ml |
| -----                         |        |          |              |

(f)=RT Delta > 1/2 Window

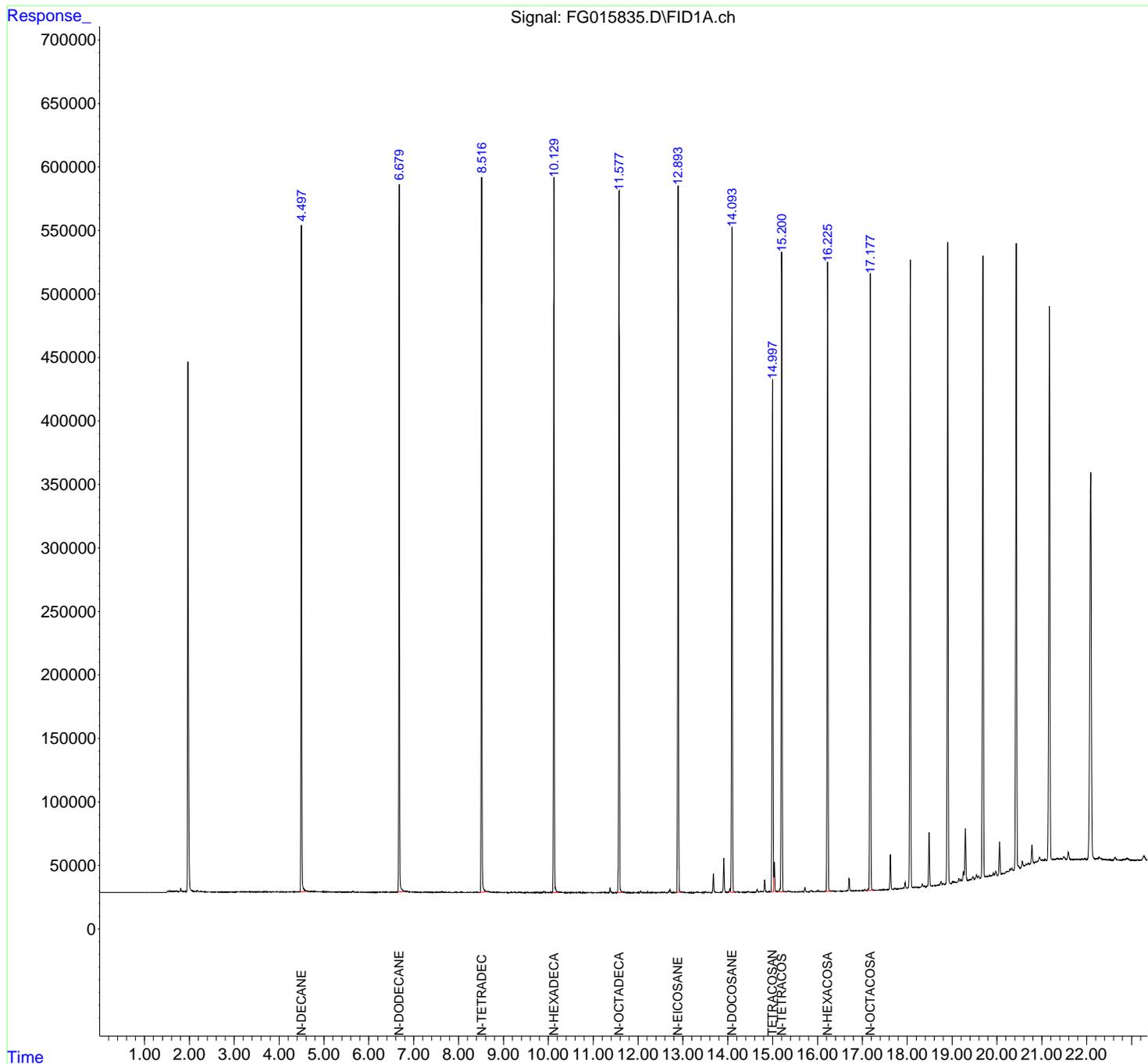
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG051325\  
 Data File : FG015835.D  
 Signal(s) : FID1A.ch  
 Acq On : 13 May 2025 21:46  
 Operator : YP\AJ  
 Sample : 50 PPM TRPH STD  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

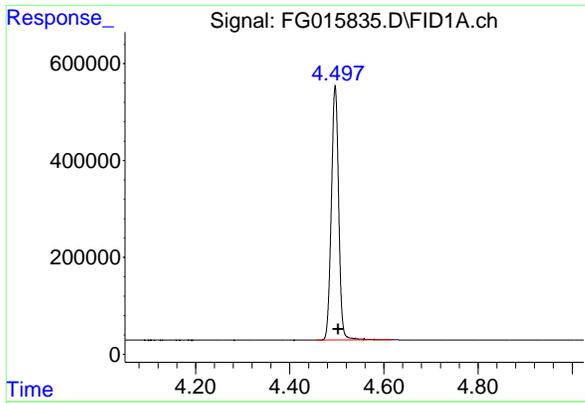
Instrument :  
 FID\_G  
 ClientSampleId :  
 50 PPM TRPH STD

Integration File: autoint1.e  
 Quant Time: May 14 03:57:15 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
 Quant Title :  
 QLast Update : Thu Apr 24 12:54:09 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

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



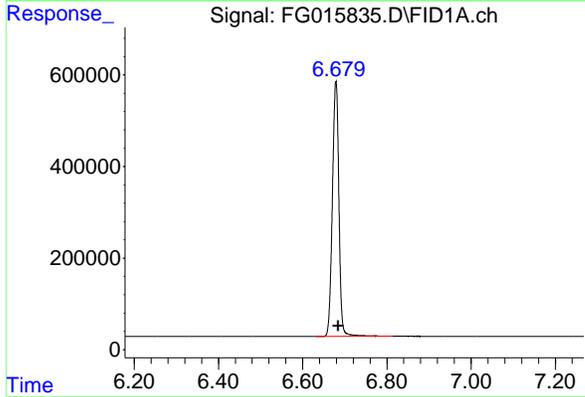
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#2 N-DECANE

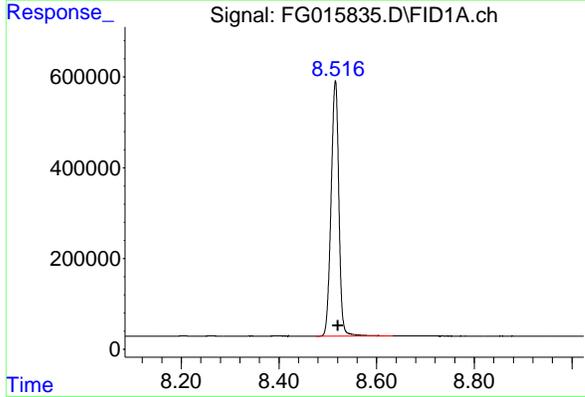
R.T.: 4.497 min  
Delta R.T.: -0.006 min  
Response: 5691010  
Conc: 51.12 ug/ml

Instrument :  
FID\_G  
ClientSampleId :  
50 PPM TRPH STD



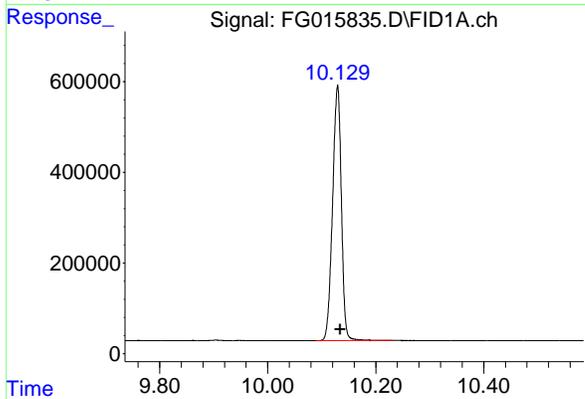
#3 N-DODECANE

R.T.: 6.679 min  
Delta R.T.: -0.005 min  
Response: 5974108  
Conc: 52.13 ug/ml



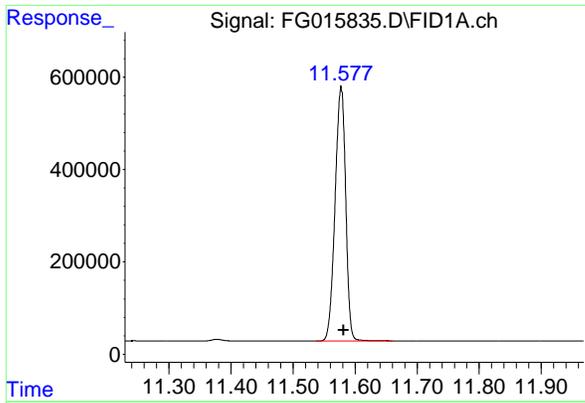
#4 N-TETRADECANE

R.T.: 8.516 min  
Delta R.T.: -0.005 min  
Response: 6207700  
Conc: 51.23 ug/ml



#5 N-HEXADECANE

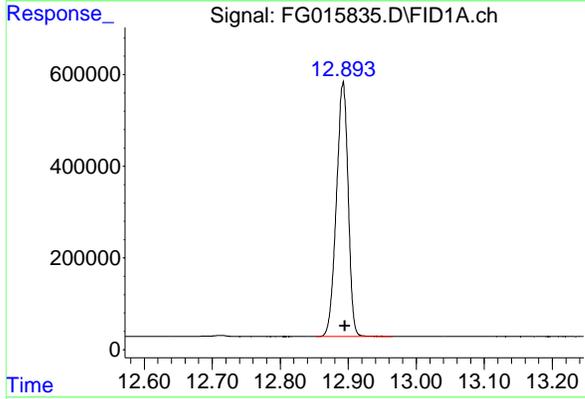
R.T.: 10.129 min  
Delta R.T.: -0.005 min  
Response: 6361678  
Conc: 50.67 ug/ml



#6 N-OCTADECANE

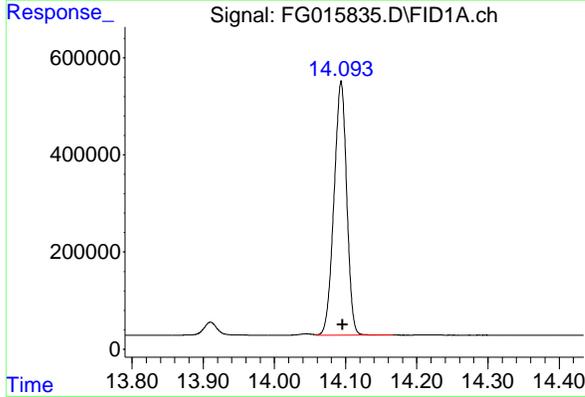
R.T.: 11.578 min  
Delta R.T.: -0.004 min  
Response: 6549621  
Conc: 49.98 ug/ml

Instrument :  
FID\_G  
ClientSampleId :  
50 PPM TRPH STD



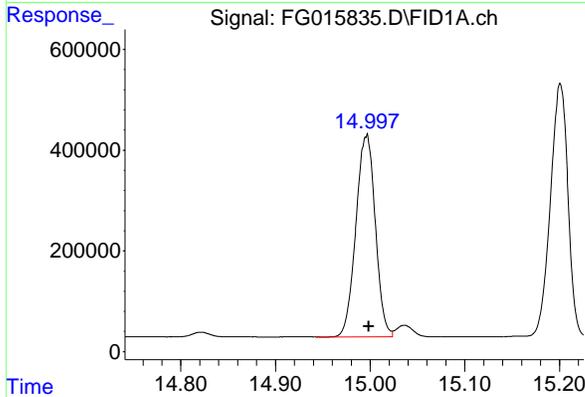
#7 N-EICOSANE

R.T.: 12.892 min  
Delta R.T.: -0.002 min  
Response: 6656888  
Conc: 49.10 ug/ml



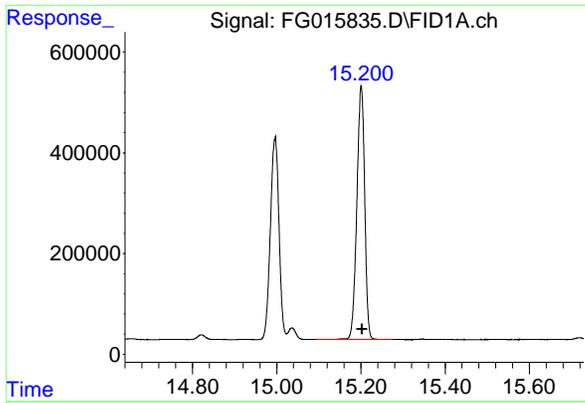
#8 N-DOCOSANE

R.T.: 14.094 min  
Delta R.T.: -0.002 min  
Response: 6494017  
Conc: 48.96 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

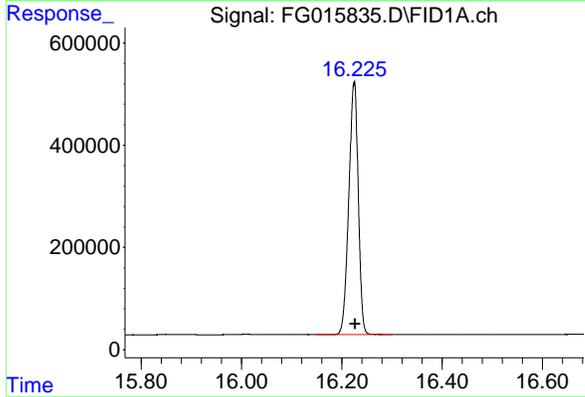
R.T.: 14.996 min  
Delta R.T.: -0.002 min  
Response: 5710489  
Conc: 48.50 ug/ml



#10 N-TETRACOSANE

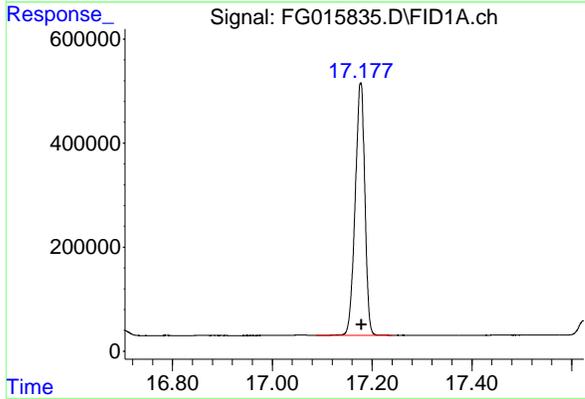
R.T.: 15.201 min  
Delta R.T.: -0.002 min  
Response: 6515965  
Conc: 49.03 ug/ml

Instrument :  
FID\_G  
ClientSampleId :  
50 PPM TRPH STD



#11 N-HEXACOSANE

R.T.: 16.225 min  
Delta R.T.: -0.002 min  
Response: 6479146  
Conc: 48.85 ug/ml



#12 N-OCTACOSANE

R.T.: 17.177 min  
Delta R.T.: -0.001 min  
Response: 6527711  
Conc: 49.51 ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG051325\  
 Data File : FG015835.D  
 Signal(s) : FID1A.ch  
 Acq On : 13 May 2025 21:46  
 Sample : 50 PPM TRPH STD  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
 Title :

Signal : FID1A.ch

| peak #                  | R. T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|-------------------------|-----------|-----------|---------|-------|-------------|-----------|-------------|------------|
| 1                       | 4.497     | 4.456     | 4.619   | BB    | 525383      | 5691010   | 85.49%      | 8.228%     |
| 2                       | 6.679     | 6.632     | 6.814   | BB    | 557151      | 5974108   | 89.74%      | 8.637%     |
| 3                       | 8.516     | 8.476     | 8.633   | BB    | 562392      | 6207700   | 93.25%      | 8.975%     |
| 4                       | 10.129    | 10.090    | 10.231  | BB    | 563052      | 6361678   | 95.57%      | 9.197%     |
| 5                       | 11.578    | 11.537    | 11.660  | BB    | 547511      | 6549621   | 98.39%      | 9.469%     |
| 6                       | 12.892    | 12.853    | 12.965  | BB    | 551855      | 6656888   | 100.00%     | 9.624%     |
| 7                       | 14.094    | 14.059    | 14.166  | VB    | 523556      | 6494017   | 97.55%      | 9.389%     |
| 8                       | 14.996    | 14.943    | 15.024  | BV    | 398233      | 5710489   | 85.78%      | 8.256%     |
| 9                       | 15.201    | 15.094    | 15.275  | BB    | 502844      | 6515965   | 97.88%      | 9.420%     |
| 10                      | 16.225    | 16.149    | 16.301  | BB    | 491501      | 6479146   | 97.33%      | 9.367%     |
| 11                      | 17.177    | 17.088    | 17.241  | BB    | 484690      | 6527711   | 98.06%      | 9.437%     |
| Sum of corrected areas: |           |           |         |       |             | 69168334  |             |            |

FG042425.M Wed May 14 05:11:03 2025

### Analytical Sequence

Client: Alliance Technical Group, LLC - Newark

SDG No.: Q1872

Project: NJ Soil PT

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 |                  | 15.0012                   |            |        |   |
|---|------------------|---------------------------|------------|--------|---|
| EPA<br>SAMPLE NO.                         | LAB<br>SAMPLE ID | DATE AND TIME<br>ANALYZED | DATAFILE   | RT     | # |
| PIBLK01                                   | LBLK01           | 13 May 2025 11:11         | FG015817.D | 14.996 |   |
| 50 PPM TRPH STD                           | 50 PPM TRPH STD  | 13 May 2025 11:40         | FG015818.D | 14.998 |   |
| PB167975BL                                | PB167975BL       | 13 May 2025 13:22         | FG015820.D | 14.998 |   |
| PB167975BS                                | PB167975BS       | 13 May 2025 13:51         | FG015821.D | 14.995 |   |
| HW0425-PT-DIES-SOIL                       | Q1872-14         | 13 May 2025 15:25         | FG015823.D | 14.994 |   |
| PIBLK02                                   | LBLK02           | 13 May 2025 15:54         | FG015824.D | 14.995 |   |
| 50 PPM TRPH STD                           | 50 PPM TRPH STD  | 13 May 2025 16:53         | FG015825.D | 14.998 |   |
| SB2-4-5MS                                 | Q1956-03MS       | 13 May 2025 18:21         | FG015828.D | 14.994 |   |
| SB2-4-5MSD                                | Q1956-04MSD      | 13 May 2025 18:50         | FG015829.D | 14.993 |   |
| PIBLK03                                   | LBLK03           | 13 May 2025 21:16         | FG015834.D | 14.993 |   |
| 50 PPM TRPH STD                           | 50 PPM TRPH STD  | 13 May 2025 21:46         | FG015835.D | 14.996 |   |

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

QC Limits  
(± 0.10 minutes)

Lower Limit  
14.9012

Upper Limits  
15.1012



# QC SAMPLE DATA

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Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG051325\  
 Data File : FG015820.D  
 Signal(s) : FID1A.ch  
 Acq On : 13 May 2025 13:22  
 Operator : YP\AJ  
 Sample : PB167975BL  
 Misc :  
 ALS Vial : 21 Sample Multiplier: 1

Instrument :  
 FID\_G  
 ClientSampleId :  
 PB167975BL

Integration File: autoint1.e  
 Quant Time: May 14 03:54:45 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
 Quant Title :  
 QLast Update : Thu Apr 24 12:54:09 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

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

| Compound                      | R.T.   | Response | Conc Units   |
|-------------------------------|--------|----------|--------------|
| -----                         |        |          |              |
| System Monitoring Compounds   |        |          |              |
| 9) S TETRACOSANE-d50 (SURR... | 14.998 | 2046304  | 17.380 ug/ml |

Target Compounds

(f)=RT Delta > 1/2 Window

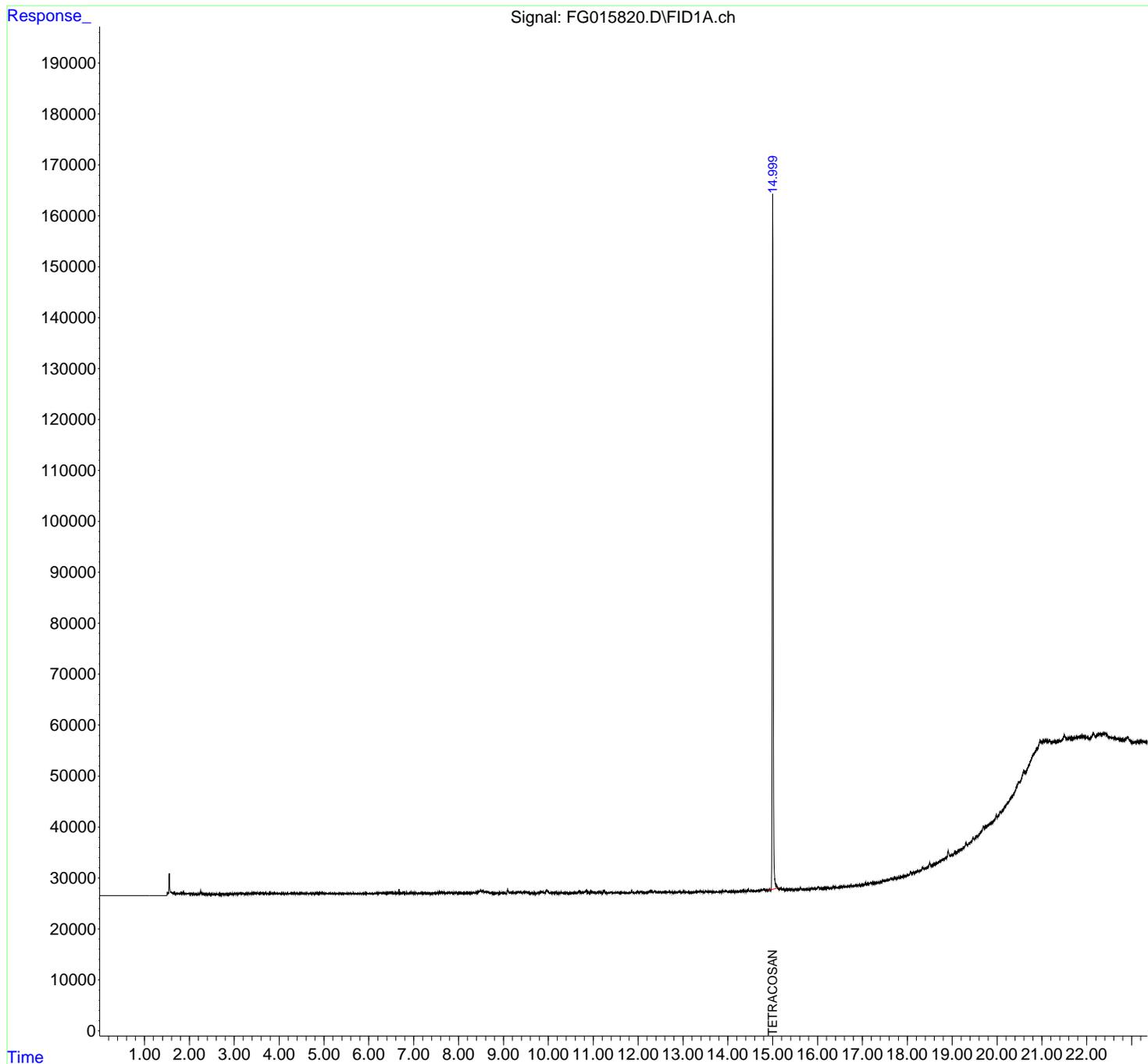
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG051325\  
Data File : FG015820.D  
Signal(s) : FID1A.ch  
Acq On : 13 May 2025 13:22  
Operator : YP\AJ  
Sample : PB167975BL  
Misc :  
ALS Vial : 21 Sample Multiplier: 1

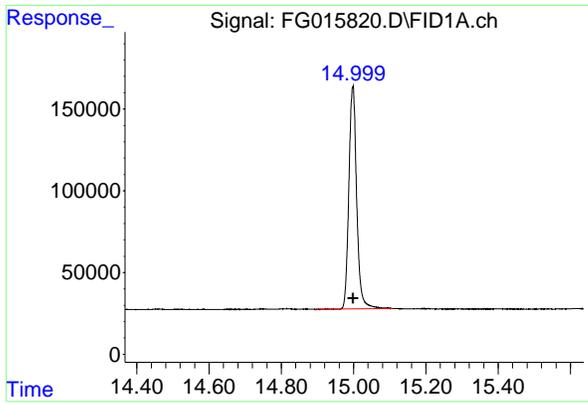
Instrument :  
FID\_G  
ClientSampleId :  
PB167975BL

Integration File: autoint1.e  
Quant Time: May 14 03:54:45 2025  
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
Quant Title :  
QLast Update : Thu Apr 24 12:54:09 2025  
Response via : Initial Calibration  
Integrator: ChemStation

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



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#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 14.998 min  
Delta R.T.: 0.000 min  
Response: 2046304  
Conc: 17.38 ug/ml

Instrument :  
FID\_G  
ClientSampleId :  
PB167975BL

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Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG051325\  
Data File : FG015820.D  
Signal(s) : FID1A.ch  
Acq On : 13 May 2025 13:22  
Sample : PB167975BL  
Misc :  
ALS Vial : 21 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
Title :

Signal : FID1A.ch

| peak #                  | R. T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|-------------------------|-----------|-----------|---------|-------|-------------|-----------|-------------|------------|
| 1                       | 14.998    | 14.896    | 15.108  | BB    | 135194      | 2046304   | 100.00%     | 100.000%   |
| Sum of corrected areas: |           |           |         |       |             | 2046304   |             |            |

FG042425.M Wed May 14 05:06:17 2025

### Report of Analysis

|                    |  |           |                    |                       |           |
|--------------------|--|-----------|--------------------|-----------------------|-----------|
| Client:            | Alliance Technical Group, LLC - Newark |           | Date Collected:    | 05/13/25              |           |
| Project:           | NJ Soil PT                             |           | Date Received:     | 05/13/25              |           |
| Client Sample ID:  | PIBLK-FG015817.D                       |           | SDG No.:           | Q1872                 |           |
| Lab Sample ID:     | I.BLK-FG015817.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 |
| FG015817.D        | 1         |           | 05/13/25      | FG051325      |

| CAS Number        | Parameter       | Conc. | Qualifier | MDL      | LOQ / CRQL | Units   |
|-------------------|-----------------|-------|-----------|----------|------------|---------|
| <b>TARGETS</b>    |                 |       |           |          |            |         |
| DRO               | DRO             | 6.00  | U         | 6.00     | 50.0       | ug/L    |
| <b>SURROGATES</b> |                 |       |           |          |            |         |
| 16416-32-3        | Tetracosane-d50 | 19.2  |           | 29 - 130 | 96%        | 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\FG051325\  
 Data File : FG015817.D  
 Signal(s) : FID1A.ch  
 Acq On : 13 May 2025 11:11  
 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: May 14 03:54:15 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
 Quant Title :  
 QLast Update : Thu Apr 24 12:54:09 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

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

| Compound                      | R.T.   | Response | Conc Units   |
|-------------------------------|--------|----------|--------------|
| -----                         |        |          |              |
| System Monitoring Compounds   |        |          |              |
| 9) S TETRACOSANE-d50 (SURR... | 14.996 | 2260251  | 19.197 ug/ml |

Target Compounds

(f)=RT Delta > 1/2 Window

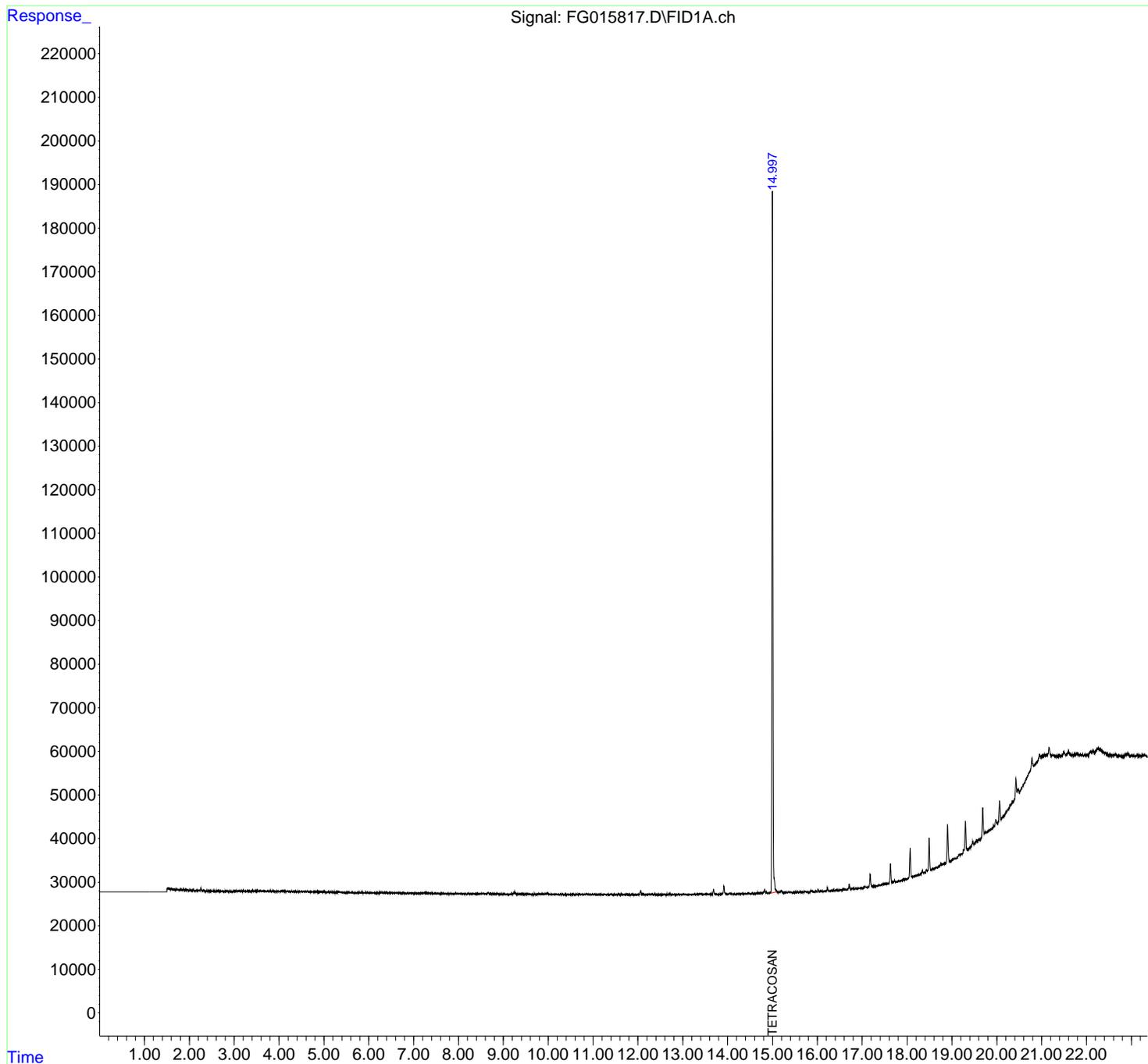
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG051325\  
Data File : FG015817.D  
Signal(s) : FID1A.ch  
Acq On : 13 May 2025 11:11  
Operator : YP\AJ  
Sample : I.BLK  
Misc :  
ALS Vial : 2 Sample Multiplier: 1

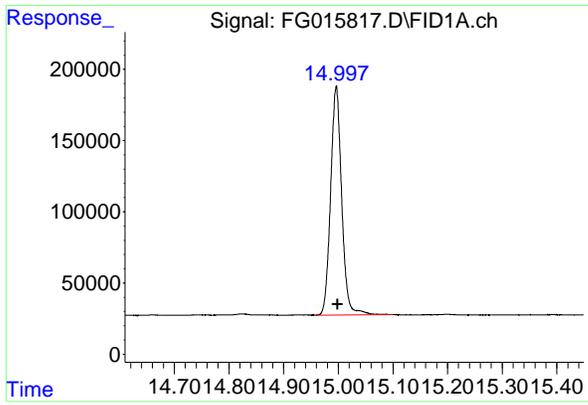
Instrument :  
FID\_G  
ClientSampleId :  
I.BLK

Integration File: autoint1.e  
Quant Time: May 14 03:54:15 2025  
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
Quant Title :  
QLast Update : Thu Apr 24 12:54:09 2025  
Response via : Initial Calibration  
Integrator: ChemStation

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



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#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 14.996 min  
Delta R.T.: -0.002 min  
Response: 2260251  
Conc: 19.20 ug/ml

Instrument :  
FID\_G  
ClientSampleId :  
I.BLK

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Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG051325\  
Data File : FG015817.D  
Signal(s) : FID1A.ch  
Acq On : 13 May 2025 11:11  
Sample : I.BLK  
Misc :  
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
Title :

Signal : FID1A.ch

| peak #                  | R. T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|-------------------------|-----------|-----------|---------|-------|-------------|-----------|-------------|------------|
| 1                       | 14.996    | 14.960    | 15.100  | BB    | 160540      | 2260251   | 100.00%     | 100.000%   |
| Sum of corrected areas: |           |           |         |       |             | 2260251   |             |            |

FG042425.M Wed May 14 05:03:26 2025

### Report of Analysis

|                    |  |           |                    |                       |           |
|--------------------|--|-----------|--------------------|-----------------------|-----------|
| Client:            | Alliance Technical Group, LLC - Newark |           | Date Collected:    | 05/13/25              |           |
| Project:           | NJ Soil PT                             |           | Date Received:     | 05/13/25              |           |
| Client Sample ID:  | PIBLK-FG015824.D                       |           | SDG No.:           | Q1872                 |           |
| Lab Sample ID:     | I.BLK-FG015824.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 |
| FG015824.D        | 1         |           | 05/13/25      | FG051325      |

| CAS Number        | Parameter       | Conc. | Qualifier | MDL      | LOQ / CRQL | Units   |
|-------------------|-----------------|-------|-----------|----------|------------|---------|
| <b>TARGETS</b>    |                 |       |           |          |            |         |
| DRO               | DRO             | 6.00  | U         | 6.00     | 50.0       | ug/L    |
| <b>SURROGATES</b> |                 |       |           |          |            |         |
| 16416-32-3        | Tetracosane-d50 | 16.9  |           | 29 - 130 | 85%        | 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\FG051325\  
 Data File : FG015824.D  
 Signal(s) : FID1A.ch  
 Acq On : 13 May 2025 15:54  
 Operator : YP\AJ  
 Sample : I.BLK  
 Misc :  
 ALS Vial : 52 Sample Multiplier: 1

Instrument :  
 FID\_G  
 ClientSampleId :  
 I.BLK

Integration File: autoint1.e  
 Quant Time: May 14 03:55:26 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
 Quant Title :  
 QLast Update : Thu Apr 24 12:54:09 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

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

| Compound                      | R.T.   | Response | Conc Units   |
|-------------------------------|--------|----------|--------------|
| -----                         |        |          |              |
| System Monitoring Compounds   |        |          |              |
| 9) S TETRACOSANE-d50 (SURR... | 14.995 | 1994752  | 16.942 ug/ml |

Target Compounds

(f)=RT Delta > 1/2 Window

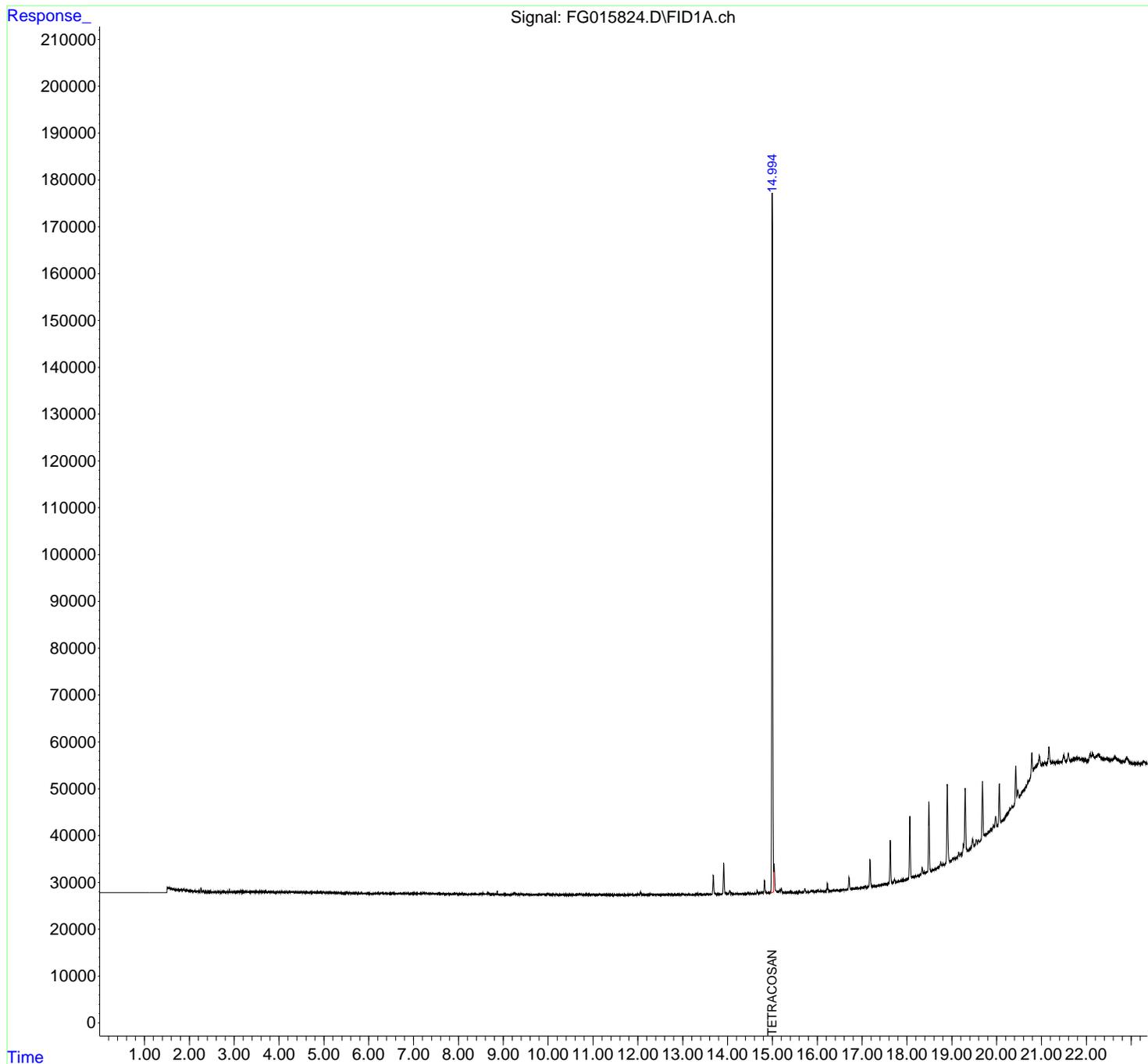
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG051325\  
Data File : FG015824.D  
Signal(s) : FID1A.ch  
Acq On : 13 May 2025 15:54  
Operator : YP\AJ  
Sample : I.BLK  
Misc :  
ALS Vial : 52 Sample Multiplier: 1

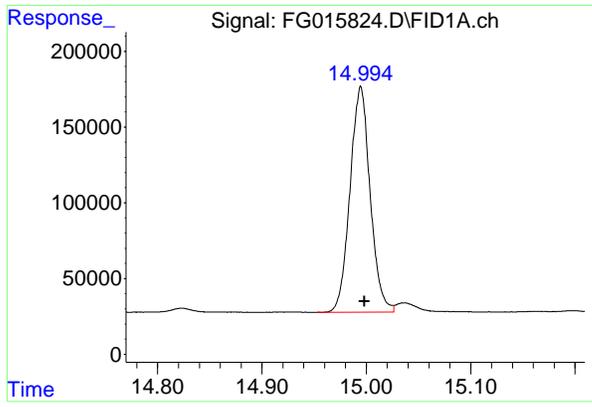
Instrument :  
FID\_G  
ClientSampleId :  
I.BLK

Integration File: autoint1.e  
Quant Time: May 14 03:55:26 2025  
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
Quant Title :  
QLast Update : Thu Apr 24 12:54:09 2025  
Response via : Initial Calibration  
Integrator: ChemStation

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



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#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 14.995 min  
Delta R.T.: -0.004 min  
Response: 1994752  
Conc: 16.94 ug/ml

Instrument :  
FID\_G  
ClientSampleId :  
I.BLK

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Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG051325\  
Data File : FG015824.D  
Signal(s) : FID1A.ch  
Acq On : 13 May 2025 15:54  
Sample : I. BLK  
Misc :  
ALS Vial : 52 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
Title :

Signal : FID1A.ch

| peak #                  | R. T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|-------------------------|-----------|-----------|---------|-------|-------------|-----------|-------------|------------|
| 1                       | 14.995    | 14.953    | 15.026  | BV    | 149231      | 1994752   | 100.00%     | 100.000%   |
| Sum of corrected areas: |           |           |         |       |             | 1994752   |             |            |

FG042425.M Wed May 14 05:08:10 2025

### Report of Analysis

|                    |  |           |                    |                       |           |
|--------------------|--|-----------|--------------------|-----------------------|-----------|
| Client:            | Alliance Technical Group, LLC - Newark |           | Date Collected:    | 05/13/25              |           |
| Project:           | NJ Soil PT                             |           | Date Received:     | 05/13/25              |           |
| Client Sample ID:  | PIBLK-FG015834.D                       |           | SDG No.:           | Q1872                 |           |
| Lab Sample ID:     | I.BLK-FG015834.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 |
| FG015834.D        | 1         |           | 05/13/25      | FG051325      |

| CAS Number        | Parameter       | Conc. | Qualifier | MDL      | LOQ / CRQL | Units   |
|-------------------|-----------------|-------|-----------|----------|------------|---------|
| <b>TARGETS</b>    |                 |       |           |          |            |         |
| DRO               | DRO             | 6.00  | U         | 6.00     | 50.0       | ug/L    |
| <b>SURROGATES</b> |                 |       |           |          |            |         |
| 16416-32-3        | Tetracosane-d50 | 19.2  |           | 29 - 130 | 96%        | 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\FG051325\  
 Data File : FG015834.D  
 Signal(s) : FID1A.ch  
 Acq On : 13 May 2025 21:16  
 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: May 14 03:57:07 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
 Quant Title :  
 QLast Update : Thu Apr 24 12:54:09 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

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

| Compound                      | R.T.   | Response | Conc Units   |
|-------------------------------|--------|----------|--------------|
| System Monitoring Compounds   |        |          |              |
| 9) S TETRACOSANE-d50 (SURR... | 14.993 | 2264007  | 19.229 ug/ml |

Target Compounds

(f)=RT Delta > 1/2 Window

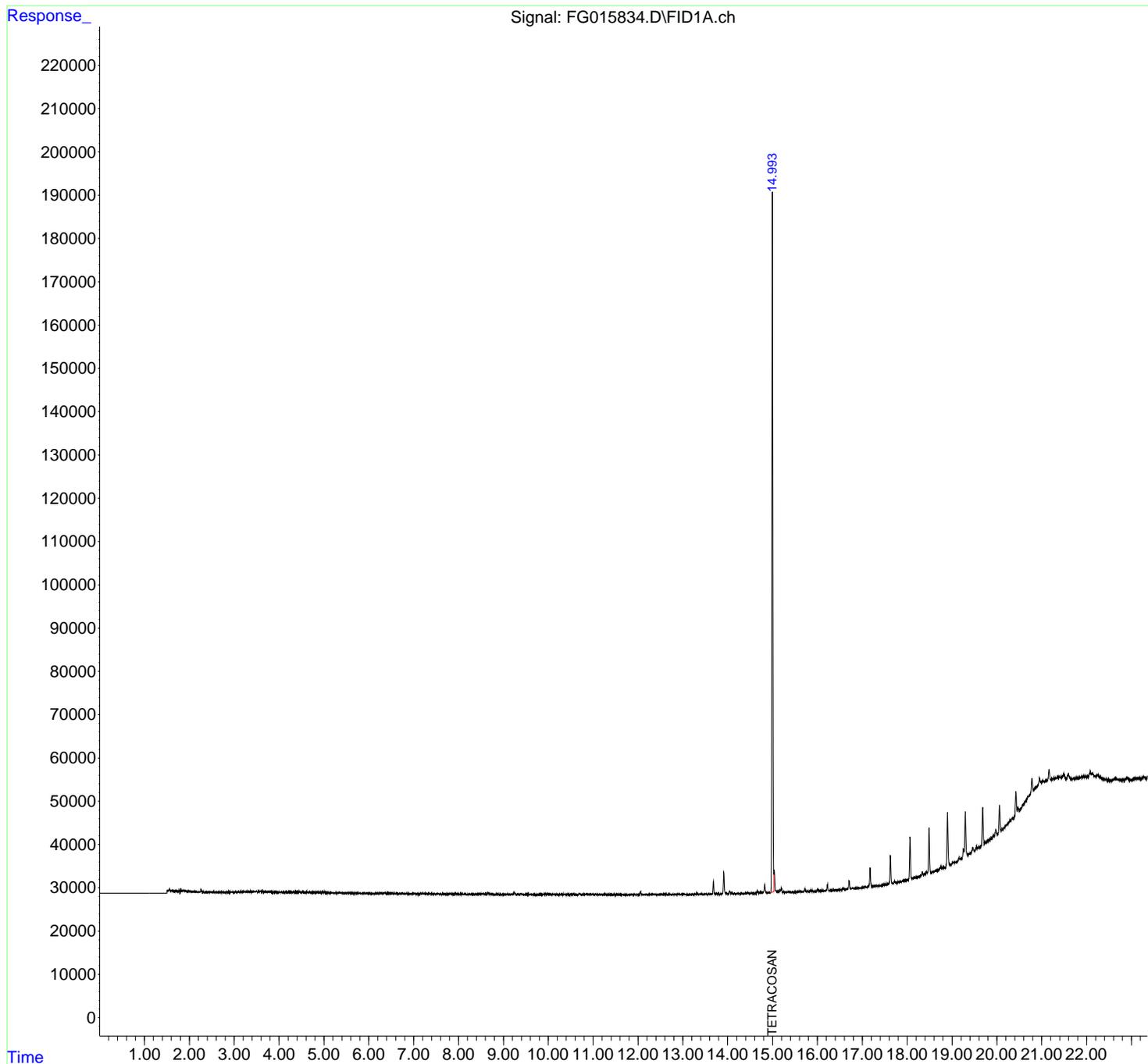
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG051325\  
Data File : FG015834.D  
Signal(s) : FID1A.ch  
Acq On : 13 May 2025 21:16  
Operator : YP\AJ  
Sample : I.BLK  
Misc :  
ALS Vial : 2 Sample Multiplier: 1

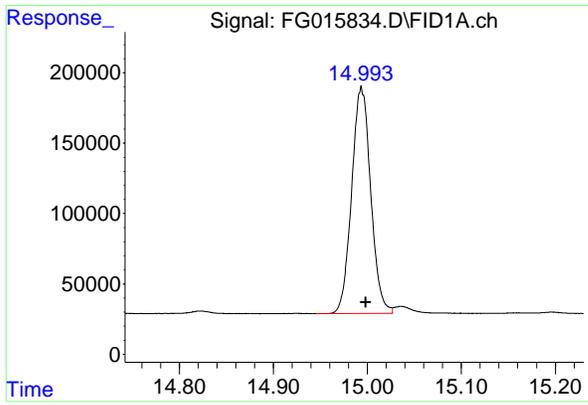
Instrument :  
FID\_G  
ClientSampleId :  
I.BLK

Integration File: autoint1.e  
Quant Time: May 14 03:57:07 2025  
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
Quant Title :  
QLast Update : Thu Apr 24 12:54:09 2025  
Response via : Initial Calibration  
Integrator: ChemStation

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



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#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 14.993 min  
Delta R.T.: -0.005 min  
Response: 2264007  
Conc: 19.23 ug/ml

Instrument :  
FID\_G  
ClientSampleId :  
I.BLK

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rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG051325\  
Data File : FG015834.D  
Signal(s) : FID1A.ch  
Acq On : 13 May 2025 21:16  
Sample : I.BLK  
Misc :  
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
Title :

Signal : FID1A.ch

| peak #                  | R. T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|-------------------------|-----------|-----------|---------|-------|-------------|-----------|-------------|------------|
| 1                       | 14.994    | 14.945    | 15.027  | BV    | 161443      | 2264007   | 100.00%     | 100.000%   |
| Sum of corrected areas: |           |           |         |       |             | 2264007   |             |            |

FG042425.M Wed May 14 05:10:08 2025

## Report of Analysis

|                    |  |                    |                       |
|--------------------|--|--------------------|-----------------------|
| Client:            | Alliance Technical Group, LLC - Newark | Date Collected:    |                       |
| Project:           | NJ Soil PT                             | Date Received:     |                       |
| Client Sample ID:  | PB167975BS                             | SDG No.:           | Q1872                 |
| Lab Sample ID:     | PB167975BS                             | 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 |
| FG015821.D        | 1         | 05/13/25 10:05 | 05/13/25 13:51 | PB167975      |

| CAS Number        | Parameter       | Conc. | Qualifier | MDL      | LOQ / CRQL | Units(Dry Weight) |
|-------------------|-----------------|-------|-----------|----------|------------|-------------------|
| <b>TARGETS</b>    |                 |       |           |          |            |                   |
| DRO               | DRO             | 6320  |           | 169      | 1670       | ug/kg             |
| <b>SURROGATES</b> |                 |       |           |          |            |                   |
| 16416-32-3        | Tetracosane-d50 | 18.6  |           | 37 - 130 | 93%        | 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\FG051325\  
 Data File : FG015821.D  
 Signal(s) : FID1A.ch  
 Acq On : 13 May 2025 13:51  
 Operator : YP\AJ  
 Sample : PB167975BS  
 Misc :  
 ALS Vial : 22 Sample Multiplier: 1

Instrument :  
 FID\_G  
 ClientSampleId :  
 PB167975BS

Integration File: autoint1.e  
 Quant Time: May 14 03:54:53 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
 Quant Title :  
 QLast Update : Thu Apr 24 12:54:09 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

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

| Compound                      | R.T.   | Response | Conc Units   |
|-------------------------------|--------|----------|--------------|
| -----                         |        |          |              |
| System Monitoring Compounds   |        |          |              |
| 9) S TETRACOSANE-d50 (SURR... | 14.995 | 2185648  | 18.564 ug/ml |
| Target Compounds              |        |          |              |
| 2) N-DECANE                   | 4.496  | 2017520  | 18.121 ug/ml |
| 3) N-DODECANE                 | 6.678  | 2165188  | 18.893 ug/ml |
| 4) N-TETRADECANE              | 8.514  | 2240728  | 18.492 ug/ml |
| 5) N-HEXADECANE               | 10.128 | 2388319  | 19.024 ug/ml |
| 6) N-OCTADECANE               | 11.576 | 2548747  | 19.448 ug/ml |
| 7) N-EICOSANE                 | 12.891 | 2541732  | 18.748 ug/ml |
| 8) N-DOCOSANE                 | 14.093 | 2547744  | 19.210 ug/ml |
| 10) N-TETRACOSANE             | 15.200 | 2567239  | 19.319 ug/ml |
| 11) N-HEXACOSANE              | 16.223 | 2544712  | 19.188 ug/ml |
| 12) N-OCTACOSANE              | 17.176 | 2522495  | 19.134 ug/ml |
| -----                         |        |          |              |

(f)=RT Delta > 1/2 Window

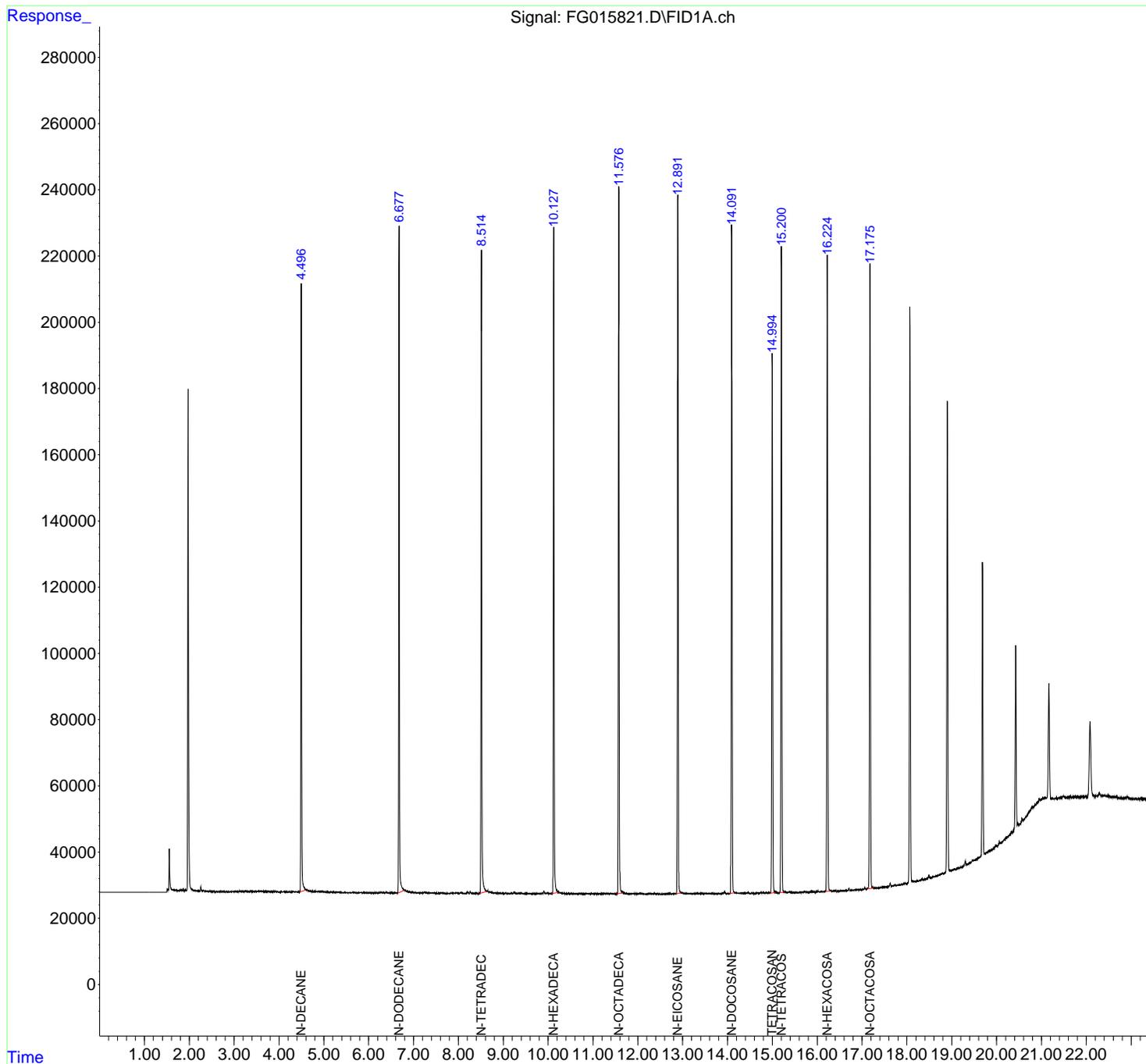
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG051325\  
 Data File : FG015821.D  
 Signal(s) : FID1A.ch  
 Acq On : 13 May 2025 13:51  
 Operator : YP\AJ  
 Sample : PB167975BS  
 Misc :  
 ALS Vial : 22 Sample Multiplier: 1

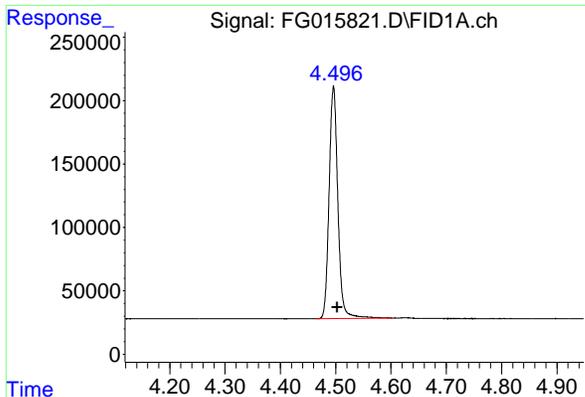
Instrument :  
 FID\_G  
 ClientSampleId :  
 PB167975BS

Integration File: autoint1.e  
 Quant Time: May 14 03:54:53 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
 Quant Title :  
 QLast Update : Thu Apr 24 12:54:09 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

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



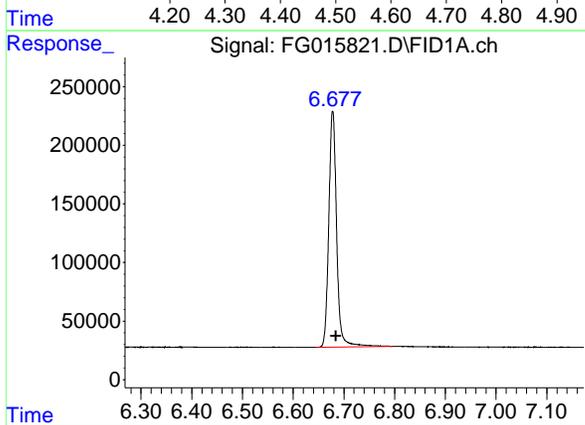
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#2 N-DECANE

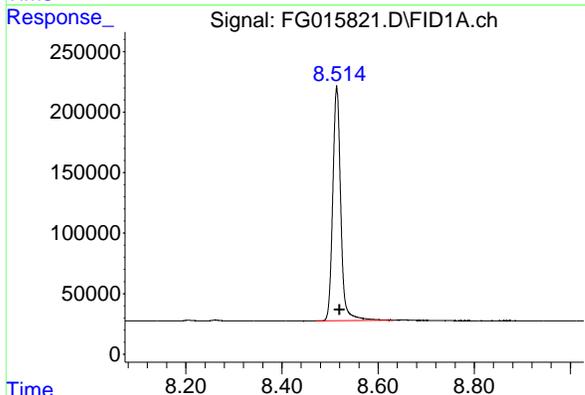
R.T.: 4.496 min  
Delta R.T.: -0.006 min  
Response: 2017520  
Conc: 18.12 ug/ml

Instrument :  
FID\_G  
ClientSampleId :  
PB167975BS



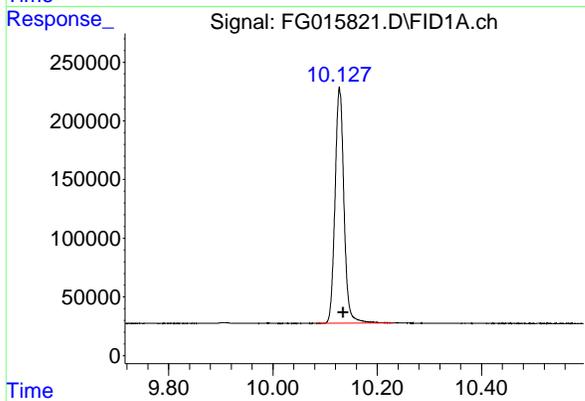
#3 N-DODECANE

R.T.: 6.678 min  
Delta R.T.: -0.006 min  
Response: 2165188  
Conc: 18.89 ug/ml



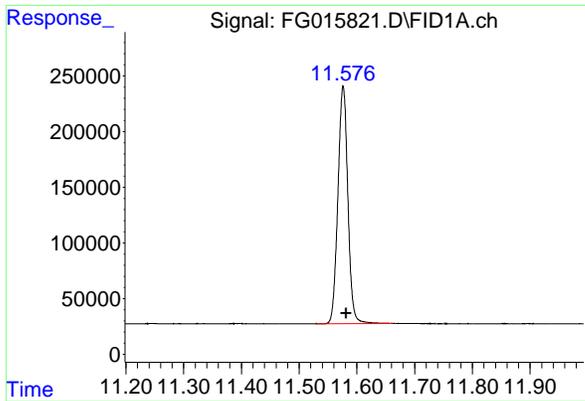
#4 N-TETRADECANE

R.T.: 8.514 min  
Delta R.T.: -0.006 min  
Response: 2240728  
Conc: 18.49 ug/ml



#5 N-HEXADECANE

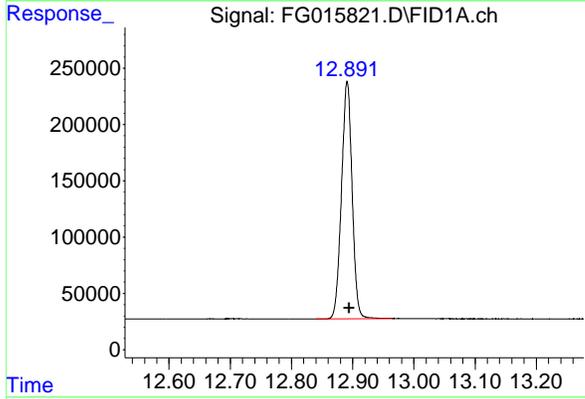
R.T.: 10.128 min  
Delta R.T.: -0.007 min  
Response: 2388319  
Conc: 19.02 ug/ml



#6 N-OCTADECANE

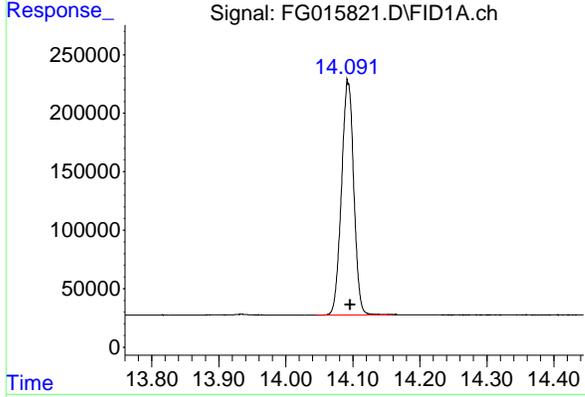
R.T.: 11.576 min  
 Delta R.T.: -0.005 min  
 Response: 2548747  
 Conc: 19.45 ug/ml

Instrument :  
 FID\_G  
 ClientSampleId :  
 PB167975BS



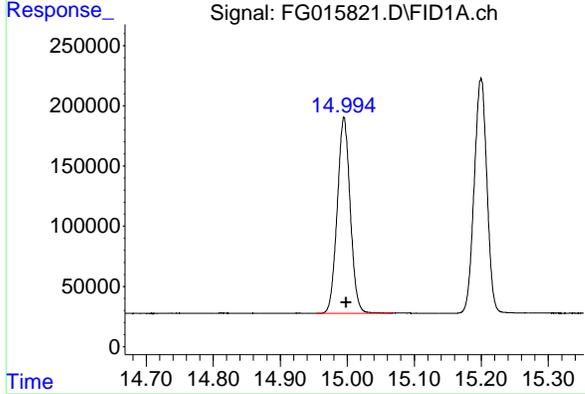
#7 N-EICOSANE

R.T.: 12.891 min  
 Delta R.T.: -0.004 min  
 Response: 2541732  
 Conc: 18.75 ug/ml



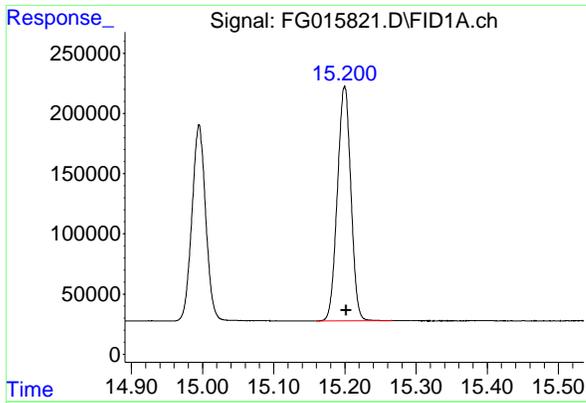
#8 N-DOCOSANE

R.T.: 14.093 min  
 Delta R.T.: -0.003 min  
 Response: 2547744  
 Conc: 19.21 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

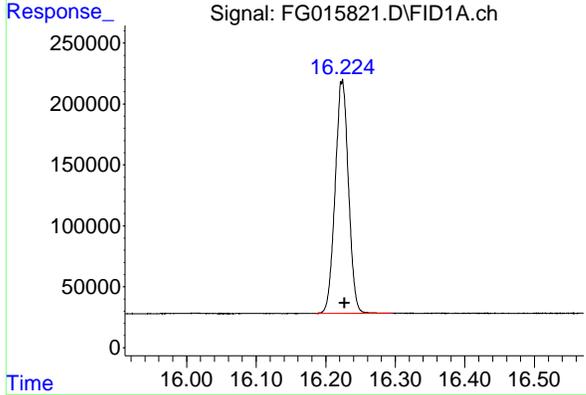
R.T.: 14.995 min  
 Delta R.T.: -0.003 min  
 Response: 2185648  
 Conc: 18.56 ug/ml



#10 N-TETRACOSANE

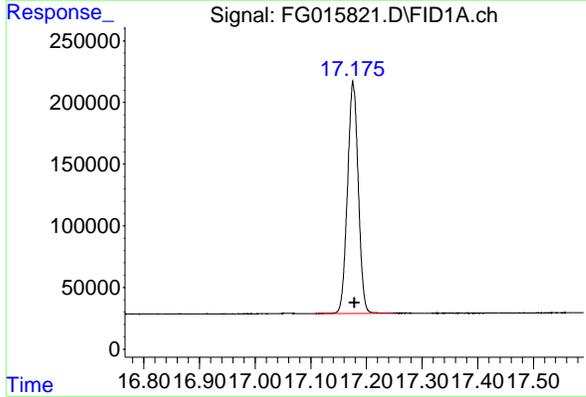
R.T.: 15.200 min  
 Delta R.T.: -0.003 min  
 Response: 2567239  
 Conc: 19.32 ug/ml

Instrument :  
 FID\_G  
 ClientSampleId :  
 PB167975BS



#11 N-HEXACOSANE

R.T.: 16.223 min  
 Delta R.T.: -0.003 min  
 Response: 2544712  
 Conc: 19.19 ug/ml



#12 N-OCTACOSANE

R.T.: 17.176 min  
 Delta R.T.: -0.003 min  
 Response: 2522495  
 Conc: 19.13 ug/ml

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Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG051325\  
 Data File : FG015821.D  
 Signal(s) : FID1A.ch  
 Acq On : 13 May 2025 13:51  
 Sample : PB167975BS  
 Misc :  
 ALS Vial : 22 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
 Title :

Signal : FID1A.ch

| peak #                  | R. T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|-------------------------|-----------|-----------|---------|-------|-------------|-----------|-------------|------------|
| 1                       | 4.496     | 4.465     | 4.603   | BB    | 183477      | 2017520   | 78.59%      | 7.680%     |
| 2                       | 6.678     | 6.645     | 6.796   | BB    | 201370      | 2165188   | 84.34%      | 8.242%     |
| 3                       | 8.514     | 8.471     | 8.630   | BB    | 193715      | 2240728   | 87.28%      | 8.530%     |
| 4                       | 10.128    | 10.083    | 10.230  | BB    | 200023      | 2388319   | 93.03%      | 9.091%     |
| 5                       | 11.576    | 11.530    | 11.662  | BB    | 213270      | 2548747   | 99.28%      | 9.702%     |
| 6                       | 12.891    | 12.840    | 12.965  | BB    | 210536      | 2541732   | 99.01%      | 9.675%     |
| 7                       | 14.093    | 14.045    | 14.160  | BB    | 197124      | 2547744   | 99.24%      | 9.698%     |
| 8                       | 14.995    | 14.954    | 15.068  | BB    | 162783      | 2185648   | 85.14%      | 8.320%     |
| 9                       | 15.200    | 15.160    | 15.267  | BB    | 194682      | 2567239   | 100.00%     | 9.772%     |
| 10                      | 16.223    | 16.186    | 16.296  | BB    | 189926      | 2544712   | 99.12%      | 9.687%     |
| 11                      | 17.176    | 17.110    | 17.247  | BB    | 186993      | 2522495   | 98.26%      | 9.602%     |
| Sum of corrected areas: |           |           |         |       |             | 26270071  |             |            |

FG042425.M Wed May 14 05:06:52 2025

### Report of Analysis

|                    |  |          |                    |                       |           |
|--------------------|--|----------|--------------------|-----------------------|-----------|
| Client:            | Alliance Technical Group, LLC - Newark |          | Date Collected:    | 05/02/25              |           |
| Project:           | NJ Soil PT                             |          | Date Received:     | 05/02/25              |           |
| Client Sample ID:  | SB2-4-5MS                              |          | SDG No.:           | Q1872                 |           |
| Lab Sample ID:     | Q1956-03MS                             |          | Matrix:            | SOIL                  |           |
| Analytical Method: | 8015D DRO                              |          | % Solid:           | 93.5                  | 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 |
| FG015828.D        | 1         | 05/13/25 10:05 | 05/13/25 18:21 | PB167975      |

| CAS Number        | Parameter       | Conc. | Qualifier | MDL      | LOQ / CRQL | Units(Dry Weight) |
|-------------------|-----------------|-------|-----------|----------|------------|-------------------|
| <b>TARGETS</b>    |                 |       |           |          |            |                   |
| DRO               | DRO             | 7670  |           | 181      | 1780       | ug/kg             |
| <b>SURROGATES</b> |                 |       |           |          |            |                   |
| 16416-32-3        | Tetracosane-d50 | 11.6  |           | 37 - 130 | 58%        | 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\FG051325\  
 Data File : FG015828.D  
 Signal(s) : FID1A.ch  
 Acq On : 13 May 2025 18:21  
 Operator : YP\AJ  
 Sample : Q1956-03MS  
 Misc :  
 ALS Vial : 27 Sample Multiplier: 1

Instrument :  
 FID\_G  
 ClientSampleId :  
 SB2-4-5MS

Integration File: autoint1.e  
 Quant Time: May 14 03:56:05 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
 Quant Title :  
 QLast Update : Thu Apr 24 12:54:09 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

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

| Compound                      | R.T.   | Response | Conc Units   |
|-------------------------------|--------|----------|--------------|
| -----                         |        |          |              |
| System Monitoring Compounds   |        |          |              |
| 9) S TETRACOSANE-d50 (SURR... | 14.994 | 1370551  | 11.641 ug/ml |
| Target Compounds              |        |          |              |
| 2) N-DECANE                   | 4.496  | 1904045  | 17.102 ug/ml |
| 3) N-DODECANE                 | 6.678  | 2060041  | 17.976 ug/ml |
| 4) N-TETRADECANE              | 8.514  | 2111814  | 17.428 ug/ml |
| 5) N-HEXADECANE               | 10.127 | 2317576  | 18.460 ug/ml |
| 6) N-OCTADECANE               | 11.576 | 2409191  | 18.383 ug/ml |
| 7) N-EICOSANE                 | 12.890 | 2381127  | 17.563 ug/ml |
| 8) N-DOCOSANE                 | 14.092 | 2362384  | 17.812 ug/ml |
| 10) N-TETRACOSANE             | 15.199 | 2393119  | 18.009 ug/ml |
| 11) N-HEXACOSANE              | 16.223 | 2350398  | 17.723 ug/ml |
| 12) N-OCTACOSANE              | 17.175 | 2353664  | 17.853 ug/ml |
| -----                         |        |          |              |

(f)=RT Delta > 1/2 Window

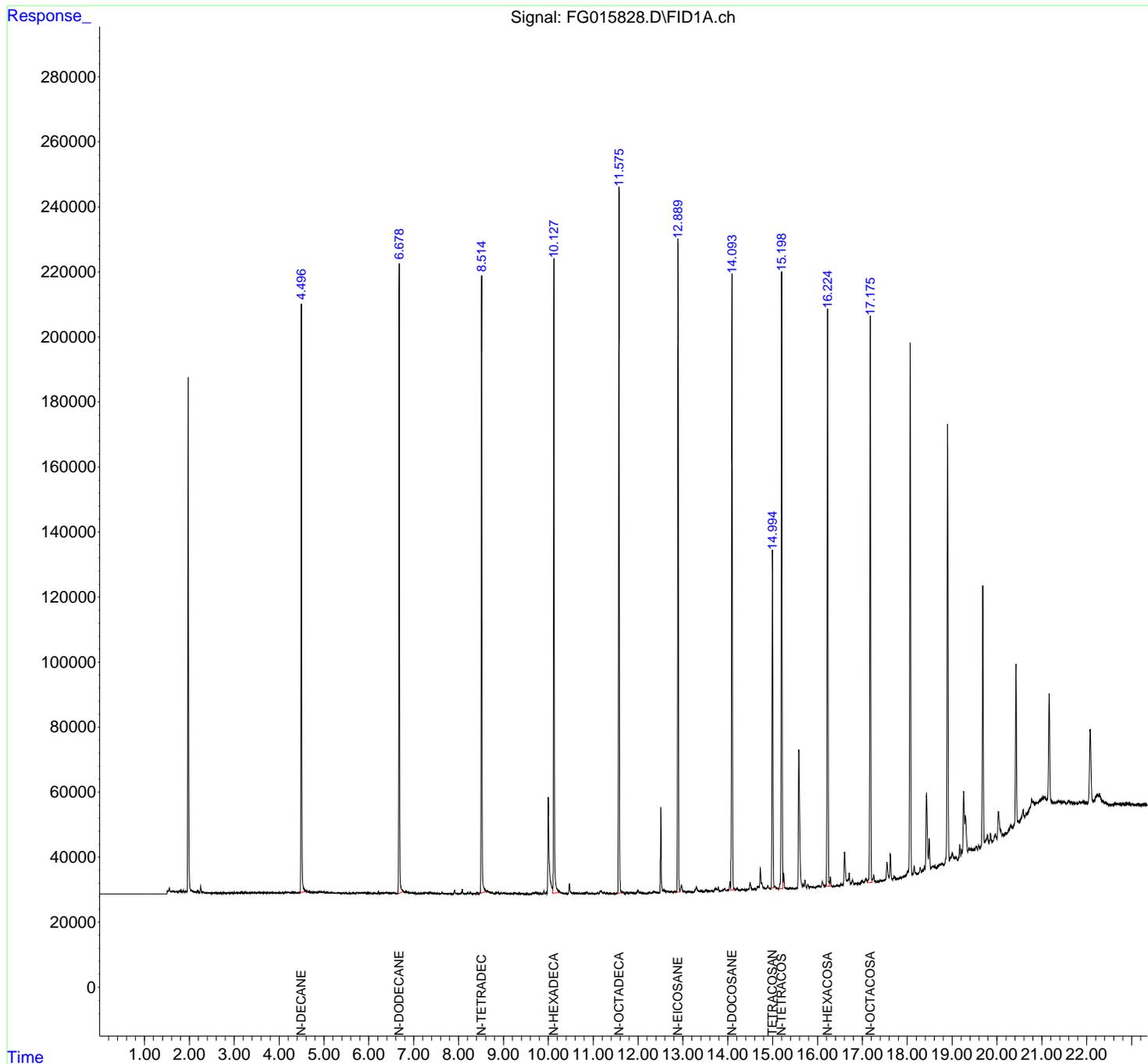
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG051325\  
 Data File : FG015828.D  
 Signal(s) : FID1A.ch  
 Acq On : 13 May 2025 18:21  
 Operator : YP\AJ  
 Sample : Q1956-03MS  
 Misc :  
 ALS Vial : 27 Sample Multiplier: 1

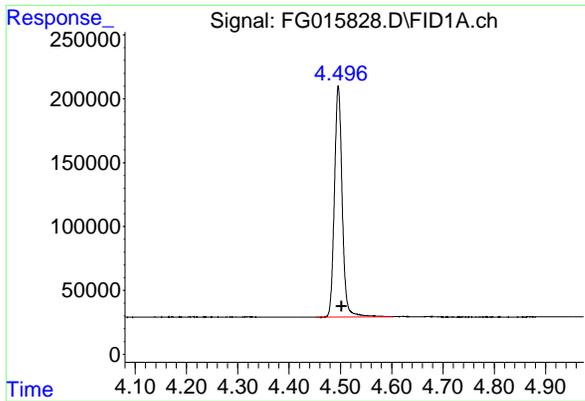
Instrument :  
 FID\_G  
 ClientSampleId :  
 SB2-4-5MS

Integration File: autoint1.e  
 Quant Time: May 14 03:56:05 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
 Quant Title :  
 QLast Update : Thu Apr 24 12:54:09 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

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



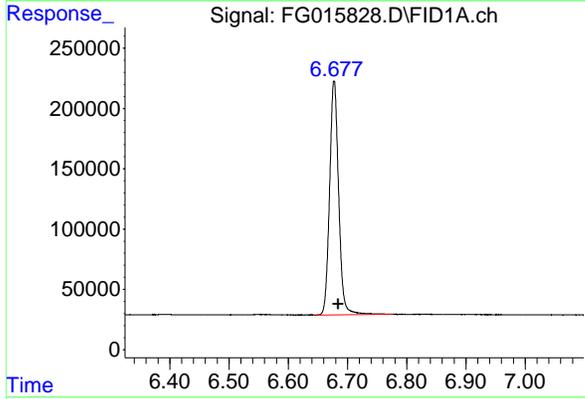
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18



#2 N-DECANE

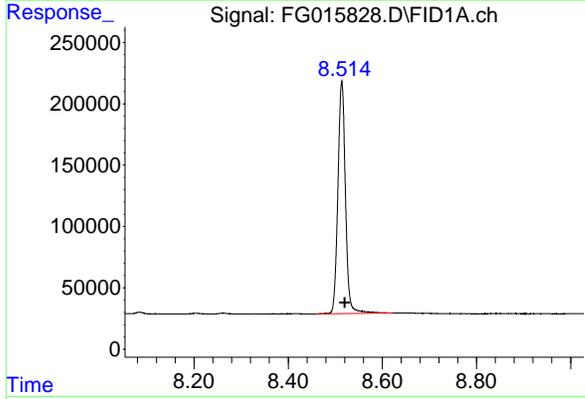
R.T.: 4.496 min  
Delta R.T.: -0.006 min  
Response: 1904045  
Conc: 17.10 ug/ml

Instrument :  
FID\_G  
ClientSampleId :  
SB2-4-5MS



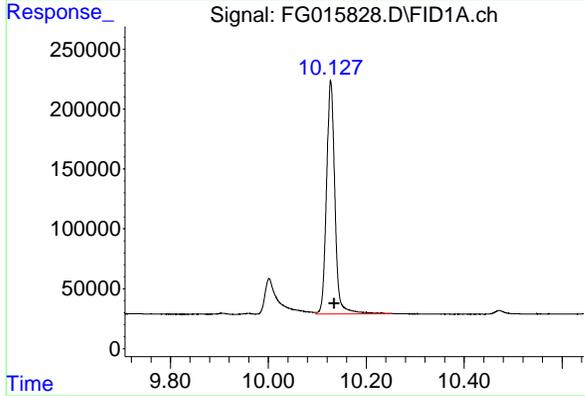
#3 N-DODECANE

R.T.: 6.678 min  
Delta R.T.: -0.007 min  
Response: 2060041  
Conc: 17.98 ug/ml



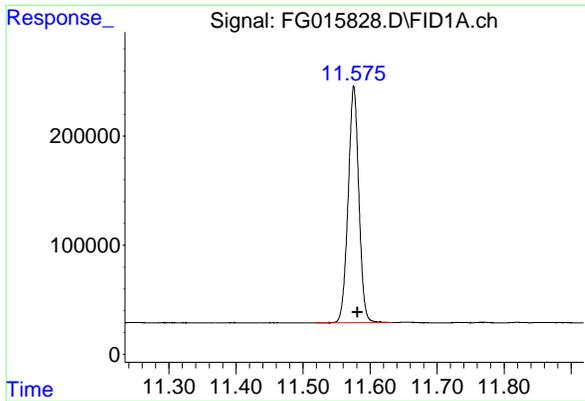
#4 N-TETRADECANE

R.T.: 8.514 min  
Delta R.T.: -0.006 min  
Response: 2111814  
Conc: 17.43 ug/ml



#5 N-HEXADECANE

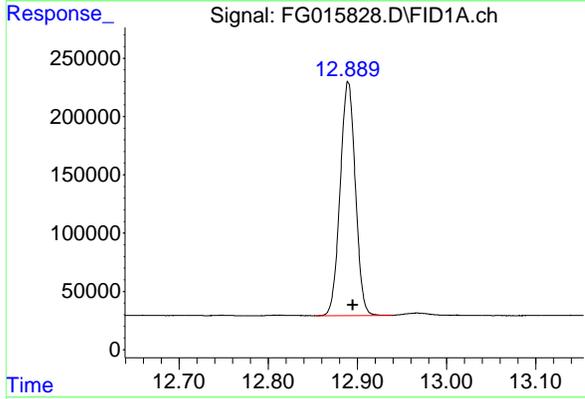
R.T.: 10.127 min  
Delta R.T.: -0.007 min  
Response: 2317576  
Conc: 18.46 ug/ml



#6 N-OCTADECANE

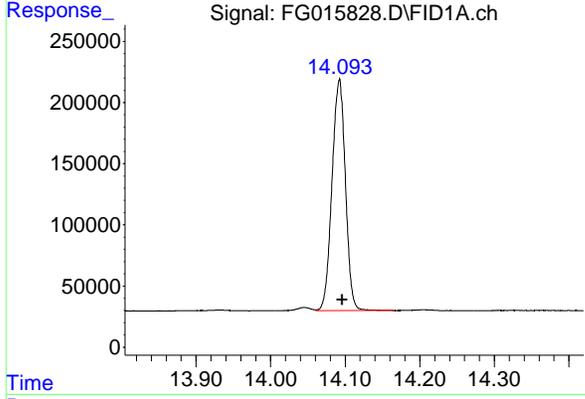
R.T.: 11.576 min  
Delta R.T.: -0.006 min  
Response: 2409191  
Conc: 18.38 ug/ml

Instrument :  
FID\_G  
ClientSampleId :  
SB2-4-5MS



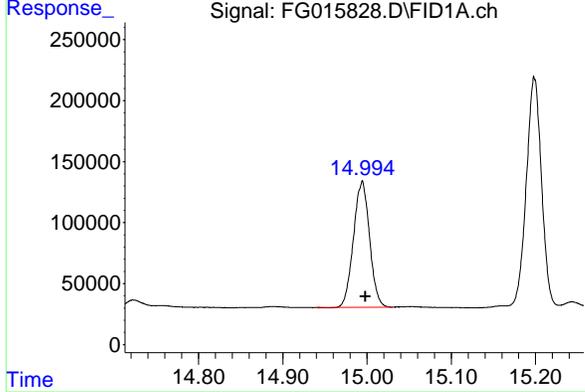
#7 N-EICOSANE

R.T.: 12.890 min  
Delta R.T.: -0.005 min  
Response: 2381127  
Conc: 17.56 ug/ml



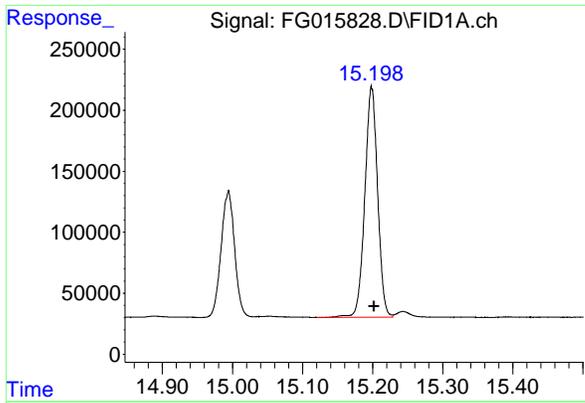
#8 N-DOCOSANE

R.T.: 14.092 min  
Delta R.T.: -0.004 min  
Response: 2362384  
Conc: 17.81 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

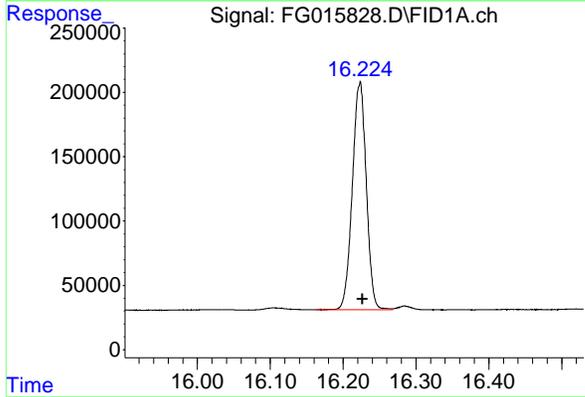
R.T.: 14.994 min  
Delta R.T.: -0.004 min  
Response: 1370551  
Conc: 11.64 ug/ml



#10 N-TETRACOSANE

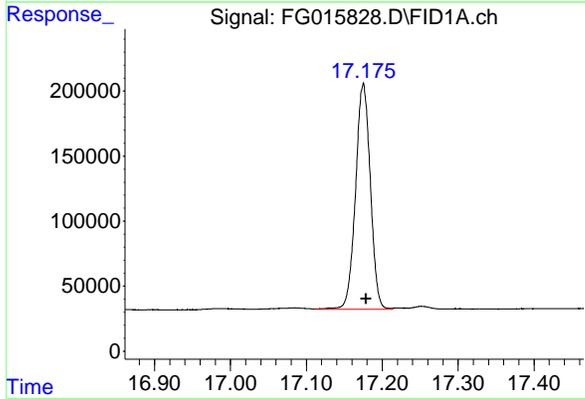
R.T.: 15.199 min  
Delta R.T.: -0.004 min  
Response: 2393119  
Conc: 18.01 ug/ml

Instrument :  
FID\_G  
ClientSampleId :  
SB2-4-5MS



#11 N-HEXACOSANE

R.T.: 16.223 min  
Delta R.T.: -0.004 min  
Response: 2350398  
Conc: 17.72 ug/ml



#12 N-OCTACOSANE

R.T.: 17.175 min  
Delta R.T.: -0.004 min  
Response: 2353664  
Conc: 17.85 ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG051325\  
 Data File : FG015828.D  
 Signal(s) : FID1A.ch  
 Acq On : 13 May 2025 18:21  
 Sample : Q1956-03  
 Misc :  
 ALS Vial : 27 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
 Title :

Signal : FID1A.ch

| peak # | R. T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|--------|-----------|-----------|---------|-------|-------------|-----------|-------------|------------|
| 1      | 4.321     | 4.300     | 4.358   | BV    | 215         | 2923      | 0.12%       | 0.010%     |
| 2      | 4.383     | 4.358     | 4.401   | PV    | 136         | 1982      | 0.08%       | 0.007%     |
| 3      | 4.406     | 4.401     | 4.422   | VV    | 96          | 750       | 0.03%       | 0.003%     |
| 4      | 4.427     | 4.422     | 4.439   | VV    | 111         | 716       | 0.03%       | 0.002%     |
| 5      | 4.442     | 4.439     | 4.463   | VV    | 167         | 1204      | 0.05%       | 0.004%     |
| 6      | 4.496     | 4.463     | 4.605   | PV    | 180925      | 1931642   | 79.59%      | 6.727%     |
| 7      | 4.623     | 4.605     | 4.653   | VV    | 744         | 15322     | 0.63%       | 0.053%     |
| 8      | 4.672     | 4.653     | 4.728   | VV    | 581         | 16038     | 0.66%       | 0.056%     |
| 9      | 4.739     | 4.728     | 4.760   | VV    | 319         | 4982      | 0.21%       | 0.017%     |
| 10     | 4.782     | 4.760     | 4.792   | VV    | 339         | 5028      | 0.21%       | 0.018%     |
| 11     | 4.797     | 4.792     | 4.805   | VV    | 270         | 1845      | 0.08%       | 0.006%     |
| 12     | 4.808     | 4.805     | 4.825   | VV    | 318         | 2929      | 0.12%       | 0.010%     |
| 13     | 4.830     | 4.825     | 4.843   | VV    | 279         | 2480      | 0.10%       | 0.009%     |
| 14     | 4.847     | 4.843     | 4.851   | VV    | 299         | 1258      | 0.05%       | 0.004%     |
| 15     | 4.873     | 4.851     | 4.880   | VV    | 386         | 5281      | 0.22%       | 0.018%     |
| 16     | 4.903     | 4.880     | 4.907   | VV    | 474         | 6324      | 0.26%       | 0.022%     |
| 17     | 4.918     | 4.907     | 4.924   | VV    | 508         | 4637      | 0.19%       | 0.016%     |
| 18     | 4.928     | 4.924     | 4.949   | VV    | 514         | 6596      | 0.27%       | 0.023%     |
| 19     | 4.952     | 4.949     | 4.966   | VV    | 398         | 4119      | 0.17%       | 0.014%     |
| 20     | 4.973     | 4.966     | 4.981   | VV    | 411         | 3165      | 0.13%       | 0.011%     |
| 21     | 4.984     | 4.981     | 4.993   | VV    | 370         | 2393      | 0.10%       | 0.008%     |
| 22     | 5.013     | 4.993     | 5.035   | VV    | 395         | 7356      | 0.30%       | 0.026%     |
| 23     | 5.049     | 5.035     | 5.054   | VV    | 361         | 2831      | 0.12%       | 0.010%     |
| 24     | 5.068     | 5.054     | 5.072   | VV    | 296         | 2617      | 0.11%       | 0.009%     |
| 25     | 5.076     | 5.072     | 5.110   | VV    | 288         | 4871      | 0.20%       | 0.017%     |
| 26     | 5.113     | 5.110     | 5.121   | VV    | 206         | 1221      | 0.05%       | 0.004%     |
| 27     | 5.127     | 5.121     | 5.131   | VV    | 211         | 1039      | 0.04%       | 0.004%     |
| 28     | 5.159     | 5.131     | 5.173   | VV    | 308         | 5658      | 0.23%       | 0.020%     |
| 29     | 5.177     | 5.173     | 5.183   | VV    | 217         | 1123      | 0.05%       | 0.004%     |
| 30     | 5.188     | 5.183     | 5.205   | VV    | 228         | 2185      | 0.09%       | 0.008%     |
| 31     | 5.206     | 5.205     | 5.224   | VV    | 190         | 1702      | 0.07%       | 0.006%     |
| 32     | 5.227     | 5.224     | 5.235   | VV    | 170         | 841       | 0.03%       | 0.003%     |
| 33     | 5.237     | 5.235     | 5.243   | VV    | 162         | 727       | 0.03%       | 0.003%     |
| 34     | 5.250     | 5.243     | 5.262   | VV    | 151         | 1618      | 0.07%       | 0.006%     |
| 35     | 5.267     | 5.262     | 5.275   | VV    | 152         | 874       | 0.04%       | 0.003%     |
| 36     | 5.279     | 5.275     | 5.286   | VV    | 190         | 794       | 0.03%       | 0.003%     |

|    |        |        |        |    | rteres |       |        |         |
|----|--------|--------|--------|----|--------|-------|--------|---------|
| 37 | 5. 297 | 5. 286 | 5. 311 | VV | 152    | 1847  | 0. 08% | 0. 006% |
| 38 | 5. 327 | 5. 311 | 5. 341 | VV | 205    | 2749  | 0. 11% | 0. 010% |
| 39 | 5. 347 | 5. 341 | 5. 366 | VV | 147    | 1684  | 0. 07% | 0. 006% |
| 40 | 5. 371 | 5. 366 | 5. 375 | VV | 114    | 539   | 0. 02% | 0. 002% |
| 41 | 5. 379 | 5. 375 | 5. 388 | VV | 117    | 899   | 0. 04% | 0. 003% |
| 42 | 5. 395 | 5. 388 | 5. 400 | VV | 155    | 857   | 0. 04% | 0. 003% |
| 43 | 5. 410 | 5. 400 | 5. 421 | VV | 159    | 1397  | 0. 06% | 0. 005% |
| 44 | 5. 442 | 5. 421 | 5. 454 | VV | 159    | 1963  | 0. 08% | 0. 007% |
| 45 | 5. 480 | 5. 454 | 5. 510 | VV | 240    | 4982  | 0. 21% | 0. 017% |
| 46 | 5. 520 | 5. 510 | 5. 529 | VV | 125    | 1200  | 0. 05% | 0. 004% |
| 47 | 5. 534 | 5. 529 | 5. 541 | PV | 103    | 642   | 0. 03% | 0. 002% |
| 48 | 5. 547 | 5. 541 | 5. 565 | VV | 127    | 1276  | 0. 05% | 0. 004% |
| 49 | 5. 568 | 5. 565 | 5. 572 | VV | 188    | 475   | 0. 02% | 0. 002% |
| 50 | 5. 575 | 5. 572 | 5. 586 | VV | 125    | 742   | 0. 03% | 0. 003% |
| 51 | 5. 589 | 5. 586 | 5. 595 | VV | 97     | 300   | 0. 01% | 0. 001% |
| 52 | 5. 605 | 5. 595 | 5. 621 | VV | 108    | 1282  | 0. 05% | 0. 004% |
| 53 | 5. 626 | 5. 621 | 5. 630 | VV | 92     | 360   | 0. 01% | 0. 001% |
| 54 | 5. 645 | 5. 630 | 5. 660 | VV | 200    | 2625  | 0. 11% | 0. 009% |
| 55 | 5. 665 | 5. 660 | 5. 680 | VV | 136    | 1075  | 0. 04% | 0. 004% |
| 56 | 5. 684 | 5. 680 | 5. 692 | VV | 79     | 476   | 0. 02% | 0. 002% |
| 57 | 5. 696 | 5. 692 | 5. 703 | VV | 101    | 450   | 0. 02% | 0. 002% |
| 58 | 5. 735 | 5. 703 | 5. 741 | VV | 404    | 4721  | 0. 19% | 0. 016% |
| 59 | 5. 746 | 5. 741 | 5. 757 | VV | 386    | 3162  | 0. 13% | 0. 011% |
| 60 | 5. 765 | 5. 757 | 5. 797 | VV | 351    | 7169  | 0. 30% | 0. 025% |
| 61 | 5. 804 | 5. 797 | 5. 820 | VV | 295    | 3698  | 0. 15% | 0. 013% |
| 62 | 5. 833 | 5. 820 | 5. 840 | VV | 279    | 2933  | 0. 12% | 0. 010% |
| 63 | 5. 842 | 5. 840 | 5. 863 | VV | 222    | 2930  | 0. 12% | 0. 010% |
| 64 | 5. 875 | 5. 863 | 5. 895 | VV | 298    | 4614  | 0. 19% | 0. 016% |
| 65 | 5. 910 | 5. 895 | 5. 969 | VV | 305    | 9645  | 0. 40% | 0. 034% |
| 66 | 5. 977 | 5. 969 | 5. 996 | VV | 269    | 2893  | 0. 12% | 0. 010% |
| 67 | 6. 000 | 5. 996 | 6. 005 | VV | 166    | 726   | 0. 03% | 0. 003% |
| 68 | 6. 025 | 6. 005 | 6. 042 | VV | 245    | 4062  | 0. 17% | 0. 014% |
| 69 | 6. 048 | 6. 042 | 6. 057 | VV | 173    | 1126  | 0. 05% | 0. 004% |
| 70 | 6. 061 | 6. 057 | 6. 069 | VV | 96     | 751   | 0. 03% | 0. 003% |
| 71 | 6. 078 | 6. 069 | 6. 083 | VV | 136    | 947   | 0. 04% | 0. 003% |
| 72 | 6. 095 | 6. 083 | 6. 108 | VV | 243    | 2295  | 0. 09% | 0. 008% |
| 73 | 6. 116 | 6. 108 | 6. 120 | VV | 212    | 1211  | 0. 05% | 0. 004% |
| 74 | 6. 125 | 6. 120 | 6. 134 | VV | 192    | 1164  | 0. 05% | 0. 004% |
| 75 | 6. 138 | 6. 134 | 6. 152 | VV | 146    | 1240  | 0. 05% | 0. 004% |
| 76 | 6. 155 | 6. 152 | 6. 182 | VV | 152    | 1422  | 0. 06% | 0. 005% |
| 77 | 6. 214 | 6. 182 | 6. 231 | VV | 579    | 8264  | 0. 34% | 0. 029% |
| 78 | 6. 235 | 6. 231 | 6. 241 | VV | 290    | 1378  | 0. 06% | 0. 005% |
| 79 | 6. 248 | 6. 241 | 6. 287 | VV | 320    | 5893  | 0. 24% | 0. 021% |
| 80 | 6. 293 | 6. 287 | 6. 298 | VV | 272    | 1544  | 0. 06% | 0. 005% |
| 81 | 6. 302 | 6. 298 | 6. 307 | VV | 242    | 1268  | 0. 05% | 0. 004% |
| 82 | 6. 315 | 6. 307 | 6. 330 | VV | 346    | 3461  | 0. 14% | 0. 012% |
| 83 | 6. 333 | 6. 330 | 6. 338 | VV | 328    | 1329  | 0. 05% | 0. 005% |
| 84 | 6. 343 | 6. 338 | 6. 353 | VV | 245    | 1933  | 0. 08% | 0. 007% |
| 85 | 6. 392 | 6. 353 | 6. 426 | VV | 519    | 12916 | 0. 53% | 0. 045% |
| 86 | 6. 437 | 6. 426 | 6. 445 | VV | 246    | 2036  | 0. 08% | 0. 007% |
| 87 | 6. 447 | 6. 445 | 6. 460 | VV | 213    | 1637  | 0. 07% | 0. 006% |
| 88 | 6. 465 | 6. 460 | 6. 489 | VV | 294    | 3459  | 0. 14% | 0. 012% |
| 89 | 6. 497 | 6. 489 | 6. 508 | VV | 213    | 1998  | 0. 08% | 0. 007% |

|     |        |        |        |    | rteres |         |         |         |
|-----|--------|--------|--------|----|--------|---------|---------|---------|
| 90  | 6. 549 | 6. 508 | 6. 614 | VV | 485    | 15163   | 0. 62%  | 0. 053% |
| 91  | 6. 622 | 6. 614 | 6. 637 | VV | 117    | 1260    | 0. 05%  | 0. 004% |
| 92  | 6. 640 | 6. 637 | 6. 648 | VV | 147    | 589     | 0. 02%  | 0. 002% |
| 93  | 6. 678 | 6. 648 | 6. 806 | VV | 193763 | 2098355 | 86. 46% | 7. 307% |
| 94  | 6. 831 | 6. 806 | 6. 899 | VV | 748    | 30239   | 1. 25%  | 0. 105% |
| 95  | 6. 907 | 6. 899 | 6. 946 | VV | 454    | 11153   | 0. 46%  | 0. 039% |
| 96  | 6. 951 | 6. 946 | 6. 954 | VV | 355    | 1671    | 0. 07%  | 0. 006% |
| 97  | 6. 958 | 6. 954 | 6. 966 | VV | 398    | 2210    | 0. 09%  | 0. 008% |
| 98  | 6. 968 | 6. 966 | 7. 017 | VV | 353    | 8007    | 0. 33%  | 0. 028% |
| 99  | 7. 022 | 7. 017 | 7. 047 | VV | 229    | 3800    | 0. 16%  | 0. 013% |
| 100 | 7. 051 | 7. 047 | 7. 065 | VV | 224    | 1929    | 0. 08%  | 0. 007% |
| 101 | 7. 082 | 7. 065 | 7. 116 | VV | 237    | 5198    | 0. 21%  | 0. 018% |
| 102 | 7. 121 | 7. 116 | 7. 126 | VV | 180    | 1020    | 0. 04%  | 0. 004% |
| 103 | 7. 157 | 7. 126 | 7. 188 | VV | 233    | 6669    | 0. 27%  | 0. 023% |
| 104 | 7. 207 | 7. 188 | 7. 216 | VV | 251    | 3727    | 0. 15%  | 0. 013% |
| 105 | 7. 251 | 7. 216 | 7. 264 | VV | 391    | 9069    | 0. 37%  | 0. 032% |
| 106 | 7. 270 | 7. 264 | 7. 277 | VV | 349    | 2495    | 0. 10%  | 0. 009% |
| 107 | 7. 281 | 7. 277 | 7. 290 | VV | 325    | 2228    | 0. 09%  | 0. 008% |
| 108 | 7. 300 | 7. 290 | 7. 307 | VV | 292    | 2921    | 0. 12%  | 0. 010% |
| 109 | 7. 310 | 7. 307 | 7. 316 | VV | 277    | 1250    | 0. 05%  | 0. 004% |
| 110 | 7. 322 | 7. 316 | 7. 329 | VV | 236    | 1712    | 0. 07%  | 0. 006% |
| 111 | 7. 332 | 7. 329 | 7. 342 | VV | 259    | 1656    | 0. 07%  | 0. 006% |
| 112 | 7. 366 | 7. 342 | 7. 371 | VV | 448    | 5728    | 0. 24%  | 0. 020% |
| 113 | 7. 374 | 7. 371 | 7. 394 | VV | 416    | 5193    | 0. 21%  | 0. 018% |
| 114 | 7. 398 | 7. 394 | 7. 418 | VV | 352    | 4167    | 0. 17%  | 0. 015% |
| 115 | 7. 423 | 7. 418 | 7. 445 | VV | 266    | 3091    | 0. 13%  | 0. 011% |
| 116 | 7. 452 | 7. 445 | 7. 466 | VV | 233    | 2361    | 0. 10%  | 0. 008% |
| 117 | 7. 472 | 7. 466 | 7. 495 | VV | 239    | 2641    | 0. 11%  | 0. 009% |
| 118 | 7. 501 | 7. 495 | 7. 519 | VV | 195    | 1922    | 0. 08%  | 0. 007% |
| 119 | 7. 524 | 7. 519 | 7. 583 | VV | 174    | 4015    | 0. 17%  | 0. 014% |
| 120 | 7. 596 | 7. 583 | 7. 602 | VV | 144    | 1242    | 0. 05%  | 0. 004% |
| 121 | 7. 629 | 7. 602 | 7. 649 | VV | 483    | 7470    | 0. 31%  | 0. 026% |
| 122 | 7. 654 | 7. 649 | 7. 682 | VV | 274    | 2554    | 0. 11%  | 0. 009% |
| 123 | 7. 690 | 7. 682 | 7. 693 | VV | 139    | 534     | 0. 02%  | 0. 002% |
| 124 | 7. 697 | 7. 693 | 7. 704 | VV | 151    | 810     | 0. 03%  | 0. 003% |
| 125 | 7. 706 | 7. 704 | 7. 721 | VV | 160    | 898     | 0. 04%  | 0. 003% |
| 126 | 7. 725 | 7. 721 | 7. 732 | VV | 98     | 516     | 0. 02%  | 0. 002% |
| 127 | 7. 740 | 7. 732 | 7. 775 | VV | 112    | 1953    | 0. 08%  | 0. 007% |
| 128 | 7. 785 | 7. 775 | 7. 801 | VV | 119    | 1281    | 0. 05%  | 0. 004% |
| 129 | 7. 806 | 7. 801 | 7. 841 | VV | 116    | 1971    | 0. 08%  | 0. 007% |
| 130 | 7. 846 | 7. 841 | 7. 869 | VV | 79     | 929     | 0. 04%  | 0. 003% |
| 131 | 7. 872 | 7. 869 | 7. 874 | PV | 80     | 138     | 0. 01%  | 0. 000% |
| 132 | 7. 912 | 7. 874 | 7. 951 | VV | 1248   | 18595   | 0. 77%  | 0. 065% |
| 133 | 7. 954 | 7. 951 | 7. 976 | VV | 178    | 2114    | 0. 09%  | 0. 007% |
| 134 | 7. 977 | 7. 976 | 7. 996 | VV | 187    | 1331    | 0. 05%  | 0. 005% |
| 135 | 8. 001 | 7. 996 | 8. 017 | VV | 145    | 1276    | 0. 05%  | 0. 004% |
| 136 | 8. 033 | 8. 017 | 8. 041 | VV | 166    | 1790    | 0. 07%  | 0. 006% |
| 137 | 8. 084 | 8. 041 | 8. 112 | VV | 1524   | 24024   | 0. 99%  | 0. 084% |
| 138 | 8. 118 | 8. 112 | 8. 144 | VV | 167    | 2216    | 0. 09%  | 0. 008% |
| 139 | 8. 164 | 8. 144 | 8. 181 | VV | 202    | 2489    | 0. 10%  | 0. 009% |
| 140 | 8. 205 | 8. 181 | 8. 238 | VV | 661    | 9514    | 0. 39%  | 0. 033% |
| 141 | 8. 262 | 8. 238 | 8. 291 | VV | 768    | 10706   | 0. 44%  | 0. 037% |

|     |         |         |         |    | rteres |         |         |         |
|-----|---------|---------|---------|----|--------|---------|---------|---------|
| 142 | 8. 296  | 8. 291  | 8. 304  | VV | 175    | 1073    | 0. 04%  | 0. 004% |
| 143 | 8. 335  | 8. 304  | 8. 342  | VV | 148    | 2504    | 0. 10%  | 0. 009% |
| 144 | 8. 345  | 8. 342  | 8. 354  | VV | 152    | 803     | 0. 03%  | 0. 003% |
| 145 | 8. 368  | 8. 354  | 8. 381  | VV | 234    | 2566    | 0. 11%  | 0. 009% |
| 146 | 8. 396  | 8. 381  | 8. 407  | VV | 272    | 3384    | 0. 14%  | 0. 012% |
| 147 | 8. 417  | 8. 407  | 8. 440  | VV | 320    | 4418    | 0. 18%  | 0. 015% |
| 148 | 8. 514  | 8. 440  | 8. 633  | VV | 189564 | 2170072 | 89. 42% | 7. 557% |
| 149 | 8. 650  | 8. 633  | 8. 685  | VV | 943    | 25160   | 1. 04%  | 0. 088% |
| 150 | 8. 691  | 8. 685  | 8. 729  | VV | 611    | 13301   | 0. 55%  | 0. 046% |
| 151 | 8. 744  | 8. 729  | 8. 761  | VV | 461    | 7414    | 0. 31%  | 0. 026% |
| 152 | 8. 763  | 8. 761  | 8. 779  | VV | 354    | 3331    | 0. 14%  | 0. 012% |
| 153 | 8. 783  | 8. 779  | 8. 814  | VV | 289    | 4830    | 0. 20%  | 0. 017% |
| 154 | 8. 842  | 8. 814  | 8. 849  | VV | 504    | 7865    | 0. 32%  | 0. 027% |
| 155 | 8. 851  | 8. 849  | 8. 857  | VV | 498    | 2126    | 0. 09%  | 0. 007% |
| 156 | 8. 862  | 8. 857  | 8. 866  | VV | 419    | 2095    | 0. 09%  | 0. 007% |
| 157 | 8. 870  | 8. 866  | 8. 904  | VV | 495    | 8694    | 0. 36%  | 0. 030% |
| 158 | 8. 907  | 8. 904  | 8. 912  | VV | 318    | 1230    | 0. 05%  | 0. 004% |
| 159 | 8. 918  | 8. 912  | 8. 922  | VV | 302    | 1523    | 0. 06%  | 0. 005% |
| 160 | 8. 928  | 8. 922  | 8. 931  | VV | 308    | 1593    | 0. 07%  | 0. 006% |
| 161 | 8. 934  | 8. 931  | 8. 937  | VV | 312    | 1153    | 0. 05%  | 0. 004% |
| 162 | 8. 943  | 8. 937  | 8. 976  | VV | 401    | 6729    | 0. 28%  | 0. 023% |
| 163 | 9. 002  | 8. 976  | 9. 040  | VV | 449    | 12103   | 0. 50%  | 0. 042% |
| 164 | 9. 046  | 9. 040  | 9. 078  | VV | 309    | 5221    | 0. 22%  | 0. 018% |
| 165 | 9. 080  | 9. 078  | 9. 095  | VV | 199    | 1709    | 0. 07%  | 0. 006% |
| 166 | 9. 108  | 9. 095  | 9. 121  | VV | 200    | 2399    | 0. 10%  | 0. 008% |
| 167 | 9. 138  | 9. 121  | 9. 159  | VV | 278    | 4658    | 0. 19%  | 0. 016% |
| 168 | 9. 169  | 9. 159  | 9. 192  | VV | 255    | 3277    | 0. 14%  | 0. 011% |
| 169 | 9. 247  | 9. 192  | 9. 285  | VV | 496    | 13866   | 0. 57%  | 0. 048% |
| 170 | 9. 290  | 9. 285  | 9. 327  | VV | 224    | 3423    | 0. 14%  | 0. 012% |
| 171 | 9. 343  | 9. 327  | 9. 369  | VV | 504    | 7006    | 0. 29%  | 0. 024% |
| 172 | 9. 393  | 9. 369  | 9. 411  | VV | 262    | 4735    | 0. 20%  | 0. 016% |
| 173 | 9. 417  | 9. 411  | 9. 429  | VV | 154    | 945     | 0. 04%  | 0. 003% |
| 174 | 9. 431  | 9. 429  | 9. 441  | VV | 111    | 500     | 0. 02%  | 0. 002% |
| 175 | 9. 449  | 9. 441  | 9. 462  | VV | 139    | 577     | 0. 02%  | 0. 002% |
| 176 | 9. 479  | 9. 462  | 9. 485  | VV | 112    | 658     | 0. 03%  | 0. 002% |
| 177 | 9. 489  | 9. 485  | 9. 498  | VV | 78     | 339     | 0. 01%  | 0. 001% |
| 178 | 9. 531  | 9. 498  | 9. 574  | VV | 269    | 4500    | 0. 19%  | 0. 016% |
| 179 | 9. 586  | 9. 574  | 9. 613  | VV | 89     | 1172    | 0. 05%  | 0. 004% |
| 180 | 9. 650  | 9. 613  | 9. 665  | PV | 528    | 7857    | 0. 32%  | 0. 027% |
| 181 | 9. 676  | 9. 665  | 9. 689  | VV | 561    | 6094    | 0. 25%  | 0. 021% |
| 182 | 9. 729  | 9. 689  | 9. 800  | VV | 617    | 24102   | 0. 99%  | 0. 084% |
| 183 | 9. 809  | 9. 800  | 9. 839  | VV | 232    | 3773    | 0. 16%  | 0. 013% |
| 184 | 9. 864  | 9. 839  | 9. 872  | VV | 239    | 3766    | 0. 16%  | 0. 013% |
| 185 | 9. 879  | 9. 872  | 9. 884  | VV | 193    | 1260    | 0. 05%  | 0. 004% |
| 186 | 9. 905  | 9. 884  | 9. 934  | VV | 946    | 12633   | 0. 52%  | 0. 044% |
| 187 | 9. 959  | 9. 934  | 9. 975  | VV | 837    | 10285   | 0. 42%  | 0. 036% |
| 188 | 10. 002 | 9. 975  | 10. 097 | VV | 29987  | 588364  | 24. 24% | 2. 049% |
| 189 | 10. 127 | 10. 097 | 10. 332 | VV | 195003 | 2378616 | 98. 01% | 8. 283% |
| 190 | 10. 335 | 10. 332 | 10. 340 | VV | 280    | 1039    | 0. 04%  | 0. 004% |
| 191 | 10. 343 | 10. 340 | 10. 361 | VV | 249    | 2514    | 0. 10%  | 0. 009% |
| 192 | 10. 366 | 10. 361 | 10. 397 | VV | 204    | 3407    | 0. 14%  | 0. 012% |
| 193 | 10. 404 | 10. 397 | 10. 426 | VV | 223    | 2615    | 0. 11%  | 0. 009% |
| 194 | 10. 428 | 10. 426 | 10. 440 | VV | 178    | 1228    | 0. 05%  | 0. 004% |

|     |        |        |        |    | rteres |         |         |        |
|-----|--------|--------|--------|----|--------|---------|---------|--------|
| 195 | 10.472 | 10.440 | 10.539 | VV | 3169   | 55735   | 2.30%   | 0.194% |
| 196 | 10.547 | 10.539 | 10.593 | VV | 346    | 9461    | 0.39%   | 0.033% |
| 197 | 10.599 | 10.593 | 10.603 | VV | 258    | 1484    | 0.06%   | 0.005% |
| 198 | 10.612 | 10.603 | 10.632 | VV | 273    | 3793    | 0.16%   | 0.013% |
| 199 | 10.645 | 10.632 | 10.667 | VV | 508    | 5822    | 0.24%   | 0.020% |
| 200 | 10.688 | 10.667 | 10.712 | VV | 368    | 5977    | 0.25%   | 0.021% |
| 201 | 10.723 | 10.712 | 10.729 | VV | 182    | 1554    | 0.06%   | 0.005% |
| 202 | 10.733 | 10.729 | 10.740 | VV | 177    | 1013    | 0.04%   | 0.004% |
| 203 | 10.759 | 10.740 | 10.776 | VV | 242    | 4019    | 0.17%   | 0.014% |
| 204 | 10.794 | 10.776 | 10.809 | VV | 228    | 3283    | 0.14%   | 0.011% |
| 205 | 10.815 | 10.809 | 10.817 | VV | 231    | 839     | 0.03%   | 0.003% |
| 206 | 10.831 | 10.817 | 10.856 | VV | 560    | 9787    | 0.40%   | 0.034% |
| 207 | 10.870 | 10.856 | 10.894 | VV | 533    | 7317    | 0.30%   | 0.025% |
| 208 | 10.901 | 10.894 | 10.906 | VV | 125    | 835     | 0.03%   | 0.003% |
| 209 | 10.940 | 10.906 | 10.949 | VV | 235    | 4108    | 0.17%   | 0.014% |
| 210 | 10.952 | 10.949 | 10.962 | VV | 187    | 1175    | 0.05%   | 0.004% |
| 211 | 10.975 | 10.962 | 11.031 | VV | 282    | 6624    | 0.27%   | 0.023% |
| 212 | 11.041 | 11.031 | 11.046 | VV | 103    | 641     | 0.03%   | 0.002% |
| 213 | 11.059 | 11.046 | 11.072 | VV | 144    | 1677    | 0.07%   | 0.006% |
| 214 | 11.100 | 11.072 | 11.127 | VV | 351    | 6886    | 0.28%   | 0.024% |
| 215 | 11.161 | 11.127 | 11.226 | VV | 878    | 33131   | 1.37%   | 0.115% |
| 216 | 11.249 | 11.226 | 11.281 | VV | 439    | 10161   | 0.42%   | 0.035% |
| 217 | 11.290 | 11.281 | 11.313 | VV | 305    | 4647    | 0.19%   | 0.016% |
| 218 | 11.321 | 11.313 | 11.335 | VV | 264    | 2770    | 0.11%   | 0.010% |
| 219 | 11.343 | 11.335 | 11.352 | VV | 169    | 1359    | 0.06%   | 0.005% |
| 220 | 11.357 | 11.352 | 11.367 | VV | 112    | 696     | 0.03%   | 0.002% |
| 221 | 11.393 | 11.367 | 11.421 | VV | 286    | 4707    | 0.19%   | 0.016% |
| 222 | 11.442 | 11.421 | 11.449 | VV | 174    | 2252    | 0.09%   | 0.008% |
| 223 | 11.462 | 11.449 | 11.485 | VV | 279    | 3072    | 0.13%   | 0.011% |
| 224 | 11.507 | 11.485 | 11.530 | VV | 182    | 3498    | 0.14%   | 0.012% |
| 225 | 11.576 | 11.530 | 11.639 | VV | 217491 | 2426959 | 100.00% | 8.452% |
| 226 | 11.655 | 11.639 | 11.706 | VV | 802    | 15862   | 0.65%   | 0.055% |
| 227 | 11.733 | 11.706 | 11.750 | VV | 490    | 7324    | 0.30%   | 0.026% |
| 228 | 11.772 | 11.750 | 11.793 | VV | 605    | 8140    | 0.34%   | 0.028% |
| 229 | 11.819 | 11.793 | 11.839 | VV | 616    | 8536    | 0.35%   | 0.030% |
| 230 | 11.859 | 11.839 | 11.917 | VV | 466    | 13489   | 0.56%   | 0.047% |
| 231 | 11.994 | 11.917 | 12.040 | VV | 1206   | 34176   | 1.41%   | 0.119% |
| 232 | 12.058 | 12.040 | 12.079 | VV | 567    | 8804    | 0.36%   | 0.031% |
| 233 | 12.105 | 12.079 | 12.121 | VV | 316    | 5482    | 0.23%   | 0.019% |
| 234 | 12.131 | 12.121 | 12.152 | VV | 247    | 3030    | 0.12%   | 0.011% |
| 235 | 12.157 | 12.152 | 12.167 | VV | 117    | 545     | 0.02%   | 0.002% |
| 236 | 12.181 | 12.167 | 12.191 | PV | 121    | 1140    | 0.05%   | 0.004% |
| 237 | 12.249 | 12.191 | 12.272 | VV | 518    | 11956   | 0.49%   | 0.042% |
| 238 | 12.305 | 12.272 | 12.316 | VV | 369    | 5750    | 0.24%   | 0.020% |
| 239 | 12.348 | 12.316 | 12.356 | VV | 699    | 10773   | 0.44%   | 0.038% |
| 240 | 12.363 | 12.356 | 12.402 | VV | 637    | 12058   | 0.50%   | 0.042% |
| 241 | 12.411 | 12.402 | 12.423 | VV | 325    | 3680    | 0.15%   | 0.013% |
| 242 | 12.428 | 12.423 | 12.437 | VV | 283    | 2202    | 0.09%   | 0.008% |
| 243 | 12.458 | 12.437 | 12.476 | VV | 380    | 5962    | 0.25%   | 0.021% |
| 244 | 12.507 | 12.476 | 12.562 | VV | 26446  | 316566  | 13.04%  | 1.102% |
| 245 | 12.573 | 12.562 | 12.591 | VV | 1092   | 14486   | 0.60%   | 0.050% |
| 246 | 12.600 | 12.591 | 12.622 | VV | 916    | 13178   | 0.54%   | 0.046% |

| rteres |         |         |         |    |        |         |         |         |  |
|--------|---------|---------|---------|----|--------|---------|---------|---------|--|
| 247    | 12. 631 | 12. 622 | 12. 637 | VV | 565    | 4681    | 0. 19%  | 0. 016% |  |
| 248    | 12. 643 | 12. 637 | 12. 646 | VV | 537    | 2686    | 0. 11%  | 0. 009% |  |
| 249    | 12. 658 | 12. 646 | 12. 686 | VV | 579    | 11644   | 0. 48%  | 0. 041% |  |
| 250    | 12. 711 | 12. 686 | 12. 731 | VV | 545    | 11533   | 0. 48%  | 0. 040% |  |
| 251    | 12. 749 | 12. 731 | 12. 772 | VV | 580    | 9158    | 0. 38%  | 0. 032% |  |
| 252    | 12. 778 | 12. 772 | 12. 786 | VV | 215    | 1430    | 0. 06%  | 0. 005% |  |
| 253    | 12. 816 | 12. 786 | 12. 851 | VV | 619    | 14026   | 0. 58%  | 0. 049% |  |
| 254    | 12. 890 | 12. 851 | 12. 935 | VV | 201307 | 2392479 | 98. 58% | 8. 332% |  |
| 255    | 12. 967 | 12. 935 | 13. 006 | VV | 2433   | 54742   | 2. 26%  | 0. 191% |  |
| 256    | 13. 009 | 13. 006 | 13. 053 | VV | 525    | 9486    | 0. 39%  | 0. 033% |  |
| 257    | 13. 060 | 13. 053 | 13. 084 | VV | 217    | 2784    | 0. 11%  | 0. 010% |  |
| 258    | 13. 103 | 13. 084 | 13. 127 | VV | 287    | 5747    | 0. 24%  | 0. 020% |  |
| 259    | 13. 148 | 13. 127 | 13. 182 | VV | 372    | 7712    | 0. 32%  | 0. 027% |  |
| 260    | 13. 193 | 13. 182 | 13. 231 | VV | 219    | 3960    | 0. 16%  | 0. 014% |  |
| 261    | 13. 235 | 13. 231 | 13. 244 | PV | 114    | 601     | 0. 02%  | 0. 002% |  |
| 262    | 13. 299 | 13. 244 | 13. 362 | VV | 1555   | 50570   | 2. 08%  | 0. 176% |  |
| 263    | 13. 381 | 13. 362 | 13. 404 | VV | 482    | 8839    | 0. 36%  | 0. 031% |  |
| 264    | 13. 411 | 13. 404 | 13. 417 | VV | 415    | 2457    | 0. 10%  | 0. 009% |  |
| 265    | 13. 421 | 13. 417 | 13. 434 | VV | 288    | 2540    | 0. 10%  | 0. 009% |  |
| 266    | 13. 436 | 13. 434 | 13. 482 | VV | 261    | 5656    | 0. 23%  | 0. 020% |  |
| 267    | 13. 504 | 13. 482 | 13. 540 | VV | 744    | 13790   | 0. 57%  | 0. 048% |  |
| 268    | 13. 561 | 13. 540 | 13. 615 | VV | 382    | 10804   | 0. 45%  | 0. 038% |  |
| 269    | 13. 630 | 13. 615 | 13. 673 | VV | 406    | 7642    | 0. 31%  | 0. 027% |  |
| 270    | 13. 676 | 13. 673 | 13. 681 | VV | 156    | 582     | 0. 02%  | 0. 002% |  |
| 271    | 13. 719 | 13. 681 | 13. 731 | VV | 995    | 14651   | 0. 60%  | 0. 051% |  |
| 272    | 13. 744 | 13. 731 | 13. 767 | VV | 847    | 14819   | 0. 61%  | 0. 052% |  |
| 273    | 13. 787 | 13. 767 | 13. 814 | VV | 1394   | 20329   | 0. 84%  | 0. 071% |  |
| 274    | 13. 820 | 13. 814 | 13. 836 | VV | 214    | 1914    | 0. 08%  | 0. 007% |  |
| 275    | 13. 933 | 13. 836 | 13. 971 | VV | 853    | 29986   | 1. 24%  | 0. 104% |  |
| 276    | 13. 992 | 13. 971 | 14. 004 | VV | 363    | 5353    | 0. 22%  | 0. 019% |  |
| 277    | 14. 007 | 14. 004 | 14. 011 | VV | 306    | 1175    | 0. 05%  | 0. 004% |  |
| 278    | 14. 046 | 14. 011 | 14. 061 | VV | 2945   | 40828   | 1. 68%  | 0. 142% |  |
| 279    | 14. 092 | 14. 061 | 14. 168 | VV | 189531 | 2383805 | 98. 22% | 8. 301% |  |
| 280    | 14. 205 | 14. 168 | 14. 251 | VV | 982    | 23507   | 0. 97%  | 0. 082% |  |
| 281    | 14. 254 | 14. 251 | 14. 265 | VV | 218    | 1548    | 0. 06%  | 0. 005% |  |
| 282    | 14. 315 | 14. 265 | 14. 347 | VV | 342    | 11629   | 0. 48%  | 0. 040% |  |
| 283    | 14. 378 | 14. 347 | 14. 406 | VV | 299    | 7999    | 0. 33%  | 0. 028% |  |
| 284    | 14. 409 | 14. 406 | 14. 422 | VV | 308    | 1634    | 0. 07%  | 0. 006% |  |
| 285    | 14. 454 | 14. 422 | 14. 466 | VV | 442    | 7452    | 0. 31%  | 0. 026% |  |
| 286    | 14. 495 | 14. 466 | 14. 554 | VV | 2406   | 54991   | 2. 27%  | 0. 191% |  |
| 287    | 14. 600 | 14. 554 | 14. 636 | VV | 394    | 14008   | 0. 58%  | 0. 049% |  |
| 288    | 14. 656 | 14. 636 | 14. 667 | VV | 1164   | 14690   | 0. 61%  | 0. 051% |  |
| 289    | 14. 685 | 14. 667 | 14. 699 | VV | 1152   | 18154   | 0. 75%  | 0. 063% |  |
| 290    | 14. 723 | 14. 699 | 14. 839 | VV | 6656   | 157218  | 6. 48%  | 0. 547% |  |
| 291    | 14. 856 | 14. 839 | 14. 866 | VV | 411    | 6024    | 0. 25%  | 0. 021% |  |
| 292    | 14. 889 | 14. 866 | 14. 956 | VV | 1273   | 32117   | 1. 32%  | 0. 112% |  |
| 293    | 14. 994 | 14. 956 | 15. 032 | VV | 103866 | 1396077 | 57. 52% | 4. 862% |  |
| 294    | 15. 052 | 15. 032 | 15. 132 | VV | 1077   | 30911   | 1. 27%  | 0. 108% |  |
| 295    | 15. 199 | 15. 132 | 15. 229 | VV | 188084 | 2405198 | 99. 10% | 8. 376% |  |
| 296    | 15. 243 | 15. 229 | 15. 370 | VV | 4948   | 79829   | 3. 29%  | 0. 278% |  |
| 297    | 15. 394 | 15. 370 | 15. 429 | VV | 387    | 6300    | 0. 26%  | 0. 022% |  |
| 298    | 15. 454 | 15. 429 | 15. 483 | VV | 133    | 2807    | 0. 12%  | 0. 010% |  |
| 299    | 15. 531 | 15. 483 | 15. 546 | PV | 241    | 4871    | 0. 20%  | 0. 017% |  |

|     |        |        |        |                         | rteres |          |        |        |
|-----|--------|--------|--------|-------------------------|--------|----------|--------|--------|
| 300 | 15.582 | 15.546 | 15.664 | VV                      | 42321  | 829993   | 34.20% | 2.890% |
| 301 | 15.676 | 15.664 | 15.696 | VV                      | 1367   | 19118    | 0.79%  | 0.067% |
| 302 | 15.719 | 15.696 | 15.756 | VV                      | 2607   | 44446    | 1.83%  | 0.155% |
| 303 | 15.783 | 15.756 | 15.821 | VV                      | 1188   | 21910    | 0.90%  | 0.076% |
| 304 | 15.851 | 15.821 | 15.875 | VV                      | 465    | 8240     | 0.34%  | 0.029% |
| 305 | 15.898 | 15.875 | 15.929 | VV                      | 222    | 4795     | 0.20%  | 0.017% |
| 306 | 15.938 | 15.929 | 15.957 | VV                      | 142    | 1403     | 0.06%  | 0.005% |
| 307 | 15.976 | 15.957 | 15.984 | VV                      | 287    | 3167     | 0.13%  | 0.011% |
| 308 | 16.020 | 15.984 | 16.073 | VV                      | 438    | 16625    | 0.69%  | 0.058% |
| 309 | 16.105 | 16.073 | 16.149 | VV                      | 1743   | 39546    | 1.63%  | 0.138% |
| 310 | 16.223 | 16.149 | 16.267 | VV                      | 175489 | 2370624  | 97.68% | 8.255% |
| 311 | 16.285 | 16.267 | 16.341 | VV                      | 3140   | 43330    | 1.79%  | 0.151% |
| 312 | 16.356 | 16.341 | 16.381 | VV                      | 227    | 2961     | 0.12%  | 0.010% |
| 313 | 16.432 | 16.381 | 16.461 | PV                      | 320    | 7515     | 0.31%  | 0.026% |
| 314 | 16.468 | 16.461 | 16.484 | VV                      | 142    | 1456     | 0.06%  | 0.005% |
| 315 | 16.521 | 16.484 | 16.546 | VV                      | 553    | 11972    | 0.49%  | 0.042% |
| 316 | 16.602 | 16.546 | 16.644 | VV                      | 10323  | 208470   | 8.59%  | 0.726% |
| 317 | 16.706 | 16.644 | 16.734 | VV                      | 3698   | 94735    | 3.90%  | 0.330% |
| 318 | 16.781 | 16.734 | 16.829 | VV                      | 1372   | 35903    | 1.48%  | 0.125% |
| 319 | 16.849 | 16.829 | 16.886 | VV                      | 306    | 7779     | 0.32%  | 0.027% |
| 320 | 16.897 | 16.886 | 16.927 | VV                      | 217    | 2535     | 0.10%  | 0.009% |
| 321 | 16.984 | 16.927 | 17.036 | PV                      | 941    | 28567    | 1.18%  | 0.099% |
| 322 | 17.085 | 17.036 | 17.113 | VV                      | 1315   | 37100    | 1.53%  | 0.129% |
| 323 | 17.175 | 17.113 | 17.212 | VV                      | 174615 | 2358240  | 97.17% | 8.212% |
| 324 | 17.222 | 17.212 | 17.236 | VV                      | 1019   | 13002    | 0.54%  | 0.045% |
| 325 | 17.252 | 17.236 | 17.282 | VV                      | 2292   | 33235    | 1.37%  | 0.116% |
| 326 | 17.298 | 17.282 | 17.332 | VV                      | 273    | 4441     | 0.18%  | 0.015% |
|     |        |        |        | Sum of corrected areas: |        | 28715910 |        |        |

FG042425. M Wed May 14 05:36:39 2025

### Report of Analysis

|                    |  |          |                    |                       |           |
|--------------------|--|----------|--------------------|-----------------------|-----------|
| Client:            | Alliance Technical Group, LLC - Newark |          | Date Collected:    | 05/02/25              |           |
| Project:           | NJ Soil PT                             |          | Date Received:     | 05/02/25              |           |
| Client Sample ID:  | SB2-4-5MSD                             |          | SDG No.:           | Q1872                 |           |
| Lab Sample ID:     | Q1956-04MSD                            |          | Matrix:            | SOIL                  |           |
| Analytical Method: | 8015D DRO                              |          | % Solid:           | 93.5                  | Decanted: |
| Sample Wt/Vol:     | 30.04                                  | 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 |
| FG015829.D        | 1         | 05/13/25 10:05 | 05/13/25 18:50 | PB167975      |

| CAS Number        | Parameter       | Conc. | Qualifier | MDL      | LOQ / CRQL | Units(Dry Weight) |
|-------------------|-----------------|-------|-----------|----------|------------|-------------------|
| <b>TARGETS</b>    |                 |       |           |          |            |                   |
| DRO               | DRO             | 7820  |           | 181      | 1780       | ug/kg             |
| <b>SURROGATES</b> |                 |       |           |          |            |                   |
| 16416-32-3        | Tetracosane-d50 | 11.9  |           | 37 - 130 | 60%        | 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\FG051325\  
 Data File : FG015829.D  
 Signal(s) : FID1A.ch  
 Acq On : 13 May 2025 18:50  
 Operator : YP\AJ  
 Sample : Q1956-04MSD  
 Misc :  
 ALS Vial : 28 Sample Multiplier: 1

Instrument :  
 FID\_G  
 ClientSampleId :  
 SB2-4-5MSD

Integration File: autoint1.e  
 Quant Time: May 14 03:56:16 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
 Quant Title :  
 QLast Update : Thu Apr 24 12:54:09 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

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

| Compound                      | R.T.   | Response | Conc Units   |
|-------------------------------|--------|----------|--------------|
| -----                         |        |          |              |
| System Monitoring Compounds   |        |          |              |
| 9) S TETRACOSANE-d50 (SURR... | 14.993 | 1406410  | 11.945 ug/ml |
| Target Compounds              |        |          |              |
| 2) N-DECANE                   | 4.496  | 1863836  | 16.741 ug/ml |
| 3) N-DODECANE                 | 6.678  | 2046373  | 17.856 ug/ml |
| 4) N-TETRADECANE              | 8.514  | 2131192  | 17.588 ug/ml |
| 5) N-HEXADECANE               | 10.127 | 2361126  | 18.807 ug/ml |
| 6) N-OCTADECANE               | 11.576 | 2465513  | 18.813 ug/ml |
| 7) N-EICOSANE                 | 12.890 | 2438874  | 17.989 ug/ml |
| 8) N-DOCOSANE                 | 14.092 | 2427066  | 18.300 ug/ml |
| 10) N-TETRACOSANE             | 15.198 | 2459726  | 18.510 ug/ml |
| 11) N-HEXACOSANE              | 16.222 | 2413835  | 18.201 ug/ml |
| 12) N-OCTACOSANE              | 17.175 | 2403412  | 18.231 ug/ml |
| -----                         |        |          |              |

(f)=RT Delta > 1/2 Window

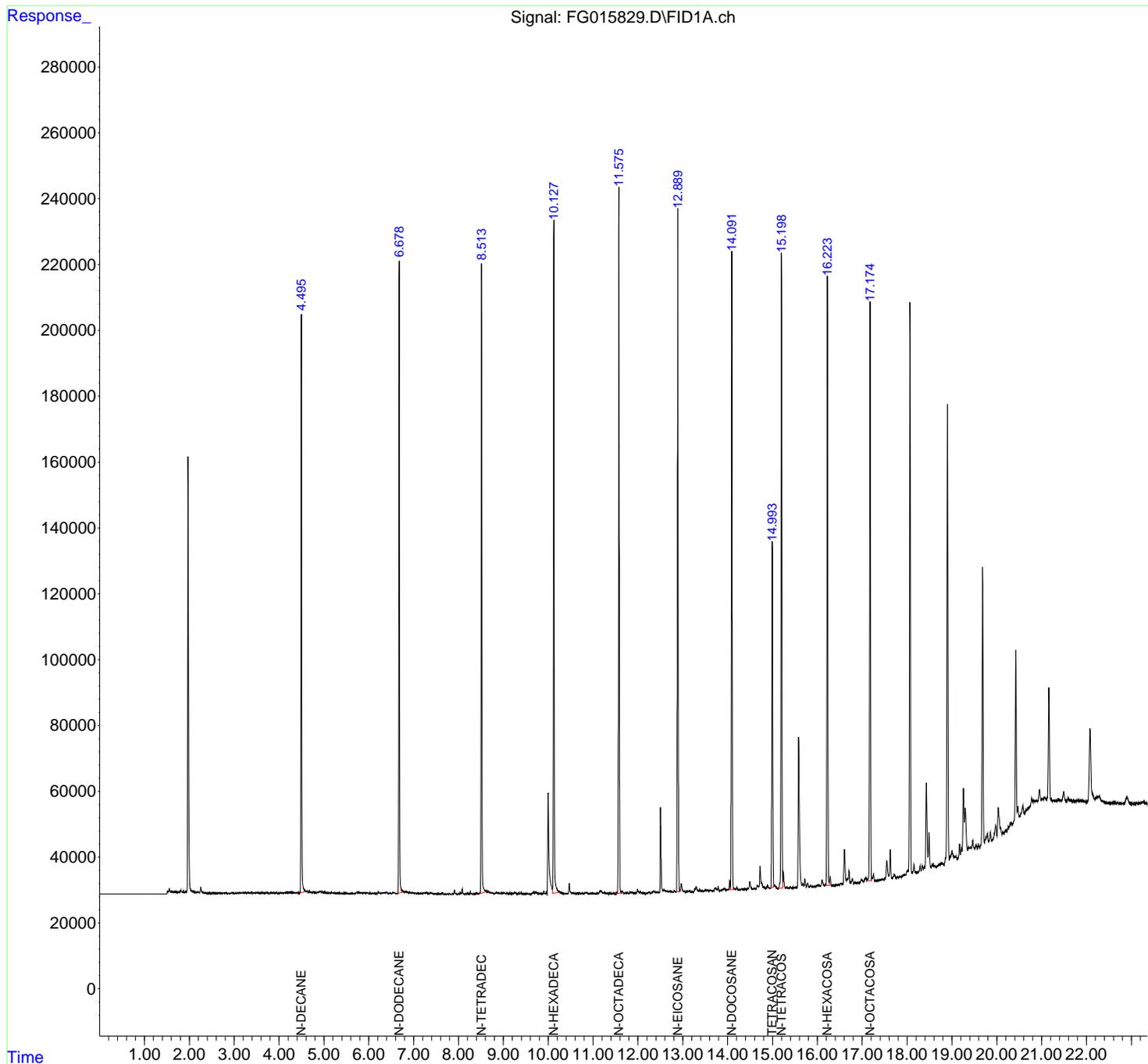
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG051325\  
 Data File : FG015829.D  
 Signal(s) : FID1A.ch  
 Acq On : 13 May 2025 18:50  
 Operator : YP\AJ  
 Sample : Q1956-04MSD  
 Misc :  
 ALS Vial : 28 Sample Multiplier: 1

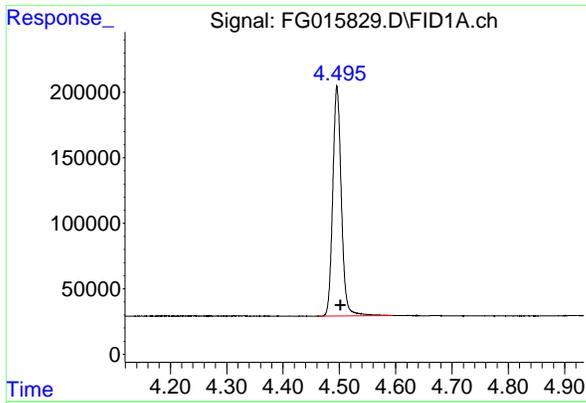
Instrument :  
 FID\_G  
 ClientSampleId :  
 SB2-4-5MSD

Integration File: autoint1.e  
 Quant Time: May 14 03:56:16 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
 Quant Title :  
 QLast Update : Thu Apr 24 12:54:09 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

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



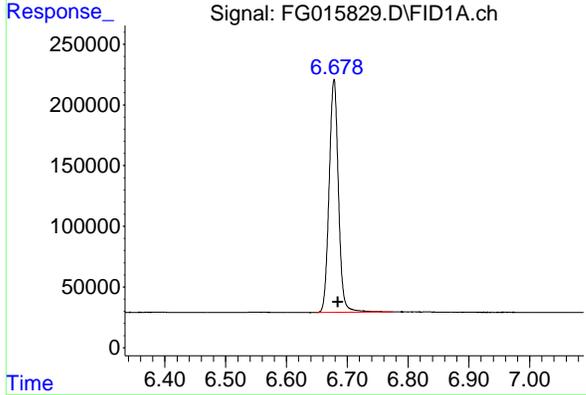
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#2 N-DECANE

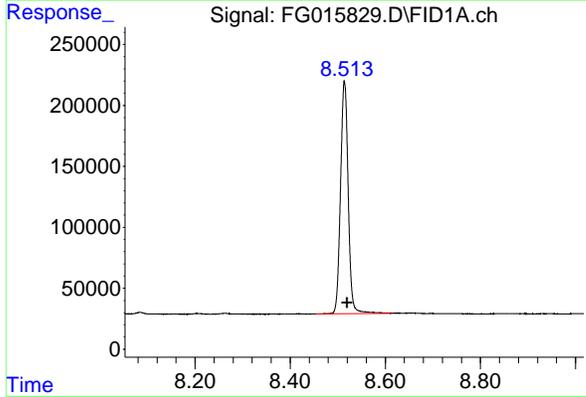
R.T.: 4.496 min  
 Delta R.T.: -0.007 min  
 Response: 1863836  
 Conc: 16.74 ug/ml

Instrument : FID\_G  
 Client Sample Id : SB2-4-5MSD



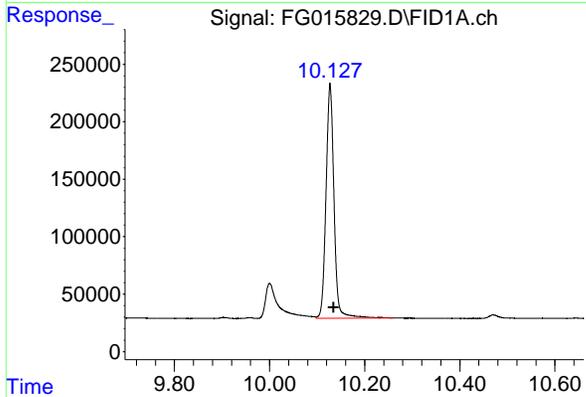
#3 N-DODECANE

R.T.: 6.678 min  
 Delta R.T.: -0.006 min  
 Response: 2046373  
 Conc: 17.86 ug/ml



#4 N-TETRADECANE

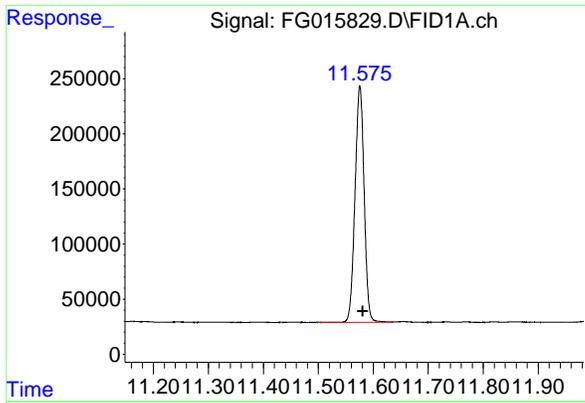
R.T.: 8.514 min  
 Delta R.T.: -0.006 min  
 Response: 2131192  
 Conc: 17.59 ug/ml



#5 N-HEXADECANE

R.T.: 10.127 min  
 Delta R.T.: -0.007 min  
 Response: 2361126  
 Conc: 18.81 ug/ml

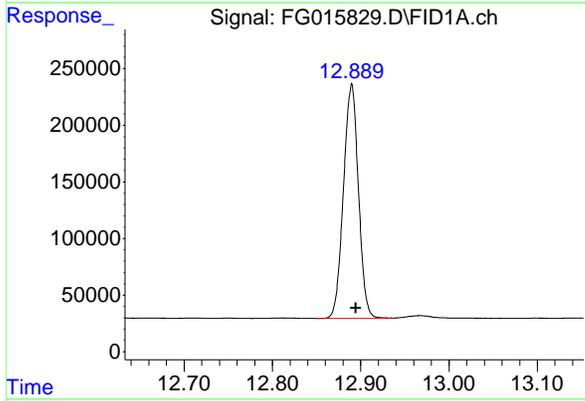
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#6 N-OCTADECANE

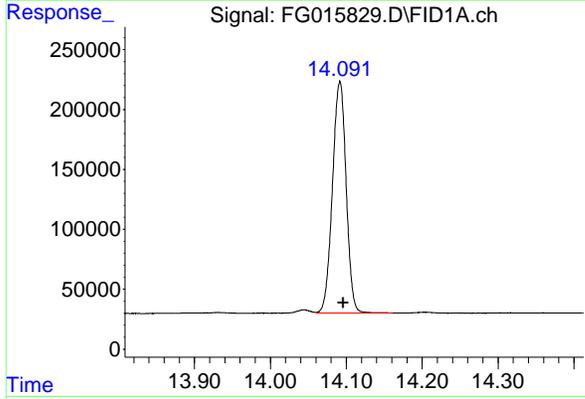
R.T.: 11.576 min  
 Delta R.T.: -0.006 min  
 Response: 2465513  
 Conc: 18.81 ug/ml

Instrument :  
 FID\_G  
 ClientSampleId :  
 SB2-4-5MSD



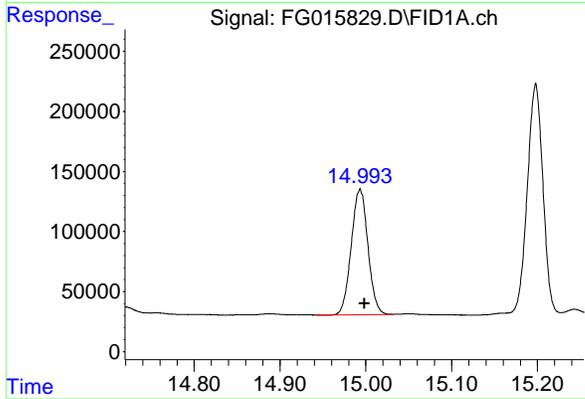
#7 N-EICOSANE

R.T.: 12.890 min  
 Delta R.T.: -0.005 min  
 Response: 2438874  
 Conc: 17.99 ug/ml



#8 N-DOCOSANE

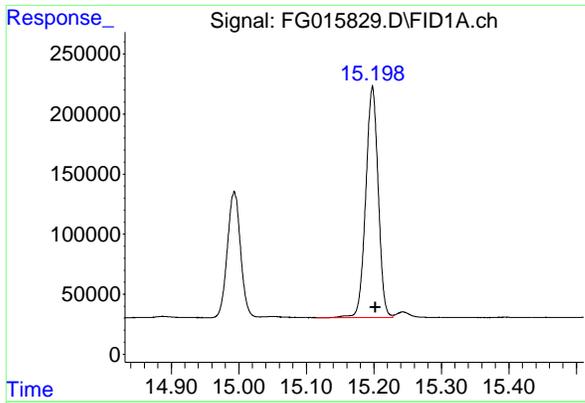
R.T.: 14.092 min  
 Delta R.T.: -0.004 min  
 Response: 2427066  
 Conc: 18.30 ug/ml



#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 14.993 min  
 Delta R.T.: -0.005 min  
 Response: 1406410  
 Conc: 11.95 ug/ml

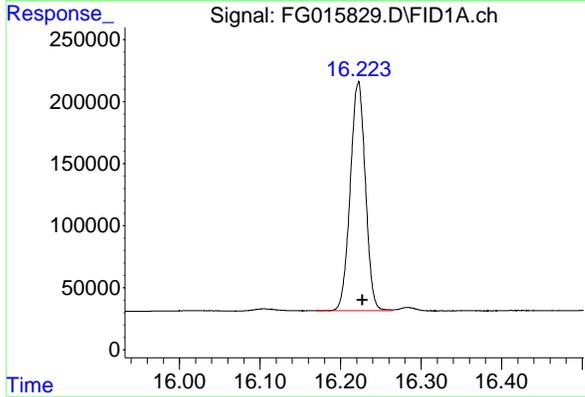
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#10 N-TETRACOSANE

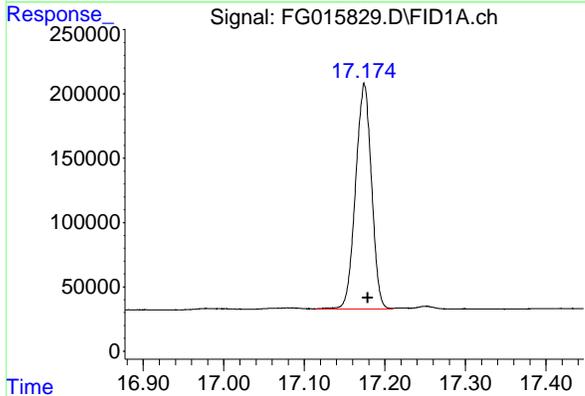
R.T.: 15.198 min  
Delta R.T.: -0.004 min  
Response: 2459726  
Conc: 18.51 ug/ml

Instrument :  
FID\_G  
ClientSampleId :  
SB2-4-5MSD



#11 N-HEXACOSANE

R.T.: 16.222 min  
Delta R.T.: -0.005 min  
Response: 2413835  
Conc: 18.20 ug/ml



#12 N-OCTACOSANE

R.T.: 17.175 min  
Delta R.T.: -0.004 min  
Response: 2403412  
Conc: 18.23 ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG051325\  
 Data File : FG015829.D  
 Signal(s) : FID1A.ch  
 Acq On : 13 May 2025 18:50  
 Sample : Q1956-04  
 Misc :  
 ALS Vial : 28 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
 Title :

Signal : FID1A.ch

| peak # | R. T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|--------|-----------|-----------|---------|-------|-------------|-----------|-------------|------------|
| 1      | 4.313     | 4.300     | 4.385   | BV    | 100         | 2262      | 0.09%       | 0.008%     |
| 2      | 4.390     | 4.385     | 4.406   | PV    | 118         | 732       | 0.03%       | 0.002%     |
| 3      | 4.412     | 4.406     | 4.421   | VV    | 145         | 547       | 0.02%       | 0.002%     |
| 4      | 4.428     | 4.421     | 4.455   | VV    | 96          | 1343      | 0.05%       | 0.005%     |
| 5      | 4.463     | 4.455     | 4.468   | PV    | 144         | 623       | 0.03%       | 0.002%     |
| 6      | 4.496     | 4.468     | 4.595   | VV    | 175326      | 1888750   | 76.10%      | 6.448%     |
| 7      | 4.598     | 4.595     | 4.604   | VV    | 569         | 2949      | 0.12%       | 0.010%     |
| 8      | 4.621     | 4.604     | 4.657   | VV    | 633         | 15031     | 0.61%       | 0.051%     |
| 9      | 4.668     | 4.657     | 4.695   | VV    | 603         | 10032     | 0.40%       | 0.034%     |
| 10     | 4.698     | 4.695     | 4.705   | VV    | 375         | 1666      | 0.07%       | 0.006%     |
| 11     | 4.707     | 4.705     | 4.721   | VV    | 329         | 2582      | 0.10%       | 0.009%     |
| 12     | 4.728     | 4.721     | 4.741   | VV    | 361         | 3569      | 0.14%       | 0.012%     |
| 13     | 4.755     | 4.741     | 4.794   | VV    | 325         | 8643      | 0.35%       | 0.030%     |
| 14     | 4.805     | 4.794     | 4.852   | VV    | 323         | 8729      | 0.35%       | 0.030%     |
| 15     | 4.890     | 4.852     | 4.894   | VV    | 456         | 8422      | 0.34%       | 0.029%     |
| 16     | 4.919     | 4.894     | 4.981   | VV    | 587         | 23250     | 0.94%       | 0.079%     |
| 17     | 5.012     | 4.981     | 5.045   | VV    | 450         | 12375     | 0.50%       | 0.042%     |
| 18     | 5.047     | 5.045     | 5.081   | VV    | 297         | 5166      | 0.21%       | 0.018%     |
| 19     | 5.083     | 5.081     | 5.089   | VV    | 281         | 1076      | 0.04%       | 0.004%     |
| 20     | 5.090     | 5.089     | 5.125   | VV    | 268         | 4557      | 0.18%       | 0.016%     |
| 21     | 5.128     | 5.125     | 5.141   | VV    | 228         | 1762      | 0.07%       | 0.006%     |
| 22     | 5.161     | 5.141     | 5.190   | VV    | 353         | 6282      | 0.25%       | 0.021%     |
| 23     | 5.196     | 5.190     | 5.212   | VV    | 187         | 1937      | 0.08%       | 0.007%     |
| 24     | 5.218     | 5.212     | 5.224   | VV    | 145         | 776       | 0.03%       | 0.003%     |
| 25     | 5.231     | 5.224     | 5.240   | VV    | 127         | 1071      | 0.04%       | 0.004%     |
| 26     | 5.248     | 5.240     | 5.270   | VV    | 165         | 1877      | 0.08%       | 0.006%     |
| 27     | 5.287     | 5.270     | 5.302   | VV    | 183         | 2091      | 0.08%       | 0.007%     |
| 28     | 5.309     | 5.302     | 5.314   | VV    | 155         | 854       | 0.03%       | 0.003%     |
| 29     | 5.319     | 5.314     | 5.322   | VV    | 181         | 533       | 0.02%       | 0.002%     |
| 30     | 5.344     | 5.322     | 5.349   | VV    | 189         | 2186      | 0.09%       | 0.007%     |
| 31     | 5.354     | 5.349     | 5.363   | VV    | 149         | 843       | 0.03%       | 0.003%     |
| 32     | 5.367     | 5.363     | 5.404   | VV    | 138         | 2288      | 0.09%       | 0.008%     |
| 33     | 5.410     | 5.404     | 5.415   | VV    | 91          | 444       | 0.02%       | 0.002%     |
| 34     | 5.423     | 5.415     | 5.427   | VV    | 143         | 619       | 0.02%       | 0.002%     |
| 35     | 5.440     | 5.427     | 5.445   | VV    | 161         | 1163      | 0.05%       | 0.004%     |
| 36     | 5.482     | 5.445     | 5.500   | VV    | 267         | 5087      | 0.20%       | 0.017%     |

|    |        |        |        |    | rteres |         |         |         |
|----|--------|--------|--------|----|--------|---------|---------|---------|
| 37 | 5. 505 | 5. 500 | 5. 519 | VV | 140    | 919     | 0. 04%  | 0. 003% |
| 38 | 5. 522 | 5. 519 | 5. 554 | VV | 140    | 1714    | 0. 07%  | 0. 006% |
| 39 | 5. 560 | 5. 554 | 5. 568 | VV | 117    | 568     | 0. 02%  | 0. 002% |
| 40 | 5. 575 | 5. 568 | 5. 583 | VV | 161    | 613     | 0. 02%  | 0. 002% |
| 41 | 5. 588 | 5. 583 | 5. 607 | VV | 142    | 1124    | 0. 05%  | 0. 004% |
| 42 | 5. 612 | 5. 607 | 5. 625 | VV | 66     | 777     | 0. 03%  | 0. 003% |
| 43 | 5. 641 | 5. 625 | 5. 695 | VV | 209    | 4595    | 0. 19%  | 0. 016% |
| 44 | 5. 702 | 5. 695 | 5. 708 | VV | 97     | 401     | 0. 02%  | 0. 001% |
| 45 | 5. 741 | 5. 708 | 5. 772 | PV | 456    | 11850   | 0. 48%  | 0. 040% |
| 46 | 5. 776 | 5. 772 | 5. 792 | VV | 367    | 4059    | 0. 16%  | 0. 014% |
| 47 | 5. 794 | 5. 792 | 5. 805 | VV | 378    | 2518    | 0. 10%  | 0. 009% |
| 48 | 5. 807 | 5. 805 | 5. 858 | VV | 384    | 8420    | 0. 34%  | 0. 029% |
| 49 | 5. 878 | 5. 858 | 5. 891 | VV | 341    | 5105    | 0. 21%  | 0. 017% |
| 50 | 5. 895 | 5. 891 | 5. 901 | VV | 266    | 1437    | 0. 06%  | 0. 005% |
| 51 | 5. 908 | 5. 901 | 5. 935 | VV | 336    | 5498    | 0. 22%  | 0. 019% |
| 52 | 5. 940 | 5. 935 | 5. 962 | VV | 254    | 3293    | 0. 13%  | 0. 011% |
| 53 | 5. 974 | 5. 962 | 6. 000 | VV | 257    | 4697    | 0. 19%  | 0. 016% |
| 54 | 6. 027 | 6. 000 | 6. 032 | VV | 254    | 3826    | 0. 15%  | 0. 013% |
| 55 | 6. 035 | 6. 032 | 6. 049 | VV | 236    | 1851    | 0. 07%  | 0. 006% |
| 56 | 6. 056 | 6. 049 | 6. 068 | VV | 179    | 1598    | 0. 06%  | 0. 005% |
| 57 | 6. 073 | 6. 068 | 6. 086 | VV | 135    | 1399    | 0. 06%  | 0. 005% |
| 58 | 6. 097 | 6. 086 | 6. 101 | VV | 224    | 1584    | 0. 06%  | 0. 005% |
| 59 | 6. 106 | 6. 101 | 6. 117 | VV | 192    | 1598    | 0. 06%  | 0. 005% |
| 60 | 6. 125 | 6. 117 | 6. 142 | VV | 206    | 2249    | 0. 09%  | 0. 008% |
| 61 | 6. 148 | 6. 142 | 6. 160 | VV | 194    | 1189    | 0. 05%  | 0. 004% |
| 62 | 6. 163 | 6. 160 | 6. 175 | VV | 102    | 723     | 0. 03%  | 0. 002% |
| 63 | 6. 181 | 6. 175 | 6. 193 | VV | 149    | 1168    | 0. 05%  | 0. 004% |
| 64 | 6. 213 | 6. 193 | 6. 231 | VV | 614    | 8599    | 0. 35%  | 0. 029% |
| 65 | 6. 234 | 6. 231 | 6. 265 | VV | 279    | 4872    | 0. 20%  | 0. 017% |
| 66 | 6. 275 | 6. 265 | 6. 279 | VV | 267    | 2040    | 0. 08%  | 0. 007% |
| 67 | 6. 286 | 6. 279 | 6. 291 | VV | 290    | 1760    | 0. 07%  | 0. 006% |
| 68 | 6. 301 | 6. 291 | 6. 317 | VV | 311    | 4133    | 0. 17%  | 0. 014% |
| 69 | 6. 335 | 6. 317 | 6. 358 | VV | 369    | 7404    | 0. 30%  | 0. 025% |
| 70 | 6. 370 | 6. 358 | 6. 376 | VV | 363    | 3634    | 0. 15%  | 0. 012% |
| 71 | 6. 388 | 6. 376 | 6. 428 | VV | 544    | 11002   | 0. 44%  | 0. 038% |
| 72 | 6. 433 | 6. 428 | 6. 442 | VV | 275    | 1799    | 0. 07%  | 0. 006% |
| 73 | 6. 450 | 6. 442 | 6. 469 | VV | 282    | 3848    | 0. 16%  | 0. 013% |
| 74 | 6. 473 | 6. 469 | 6. 493 | VV | 257    | 3155    | 0. 13%  | 0. 011% |
| 75 | 6. 497 | 6. 493 | 6. 510 | VV | 252    | 2017    | 0. 08%  | 0. 007% |
| 76 | 6. 517 | 6. 510 | 6. 523 | VV | 260    | 1681    | 0. 07%  | 0. 006% |
| 77 | 6. 546 | 6. 523 | 6. 599 | VV | 542    | 15523   | 0. 63%  | 0. 053% |
| 78 | 6. 605 | 6. 599 | 6. 620 | VV | 250    | 2365    | 0. 10%  | 0. 008% |
| 79 | 6. 625 | 6. 620 | 6. 632 | VV | 205    | 1121    | 0. 05%  | 0. 004% |
| 80 | 6. 635 | 6. 632 | 6. 640 | VV | 198    | 732     | 0. 03%  | 0. 003% |
| 81 | 6. 678 | 6. 640 | 6. 800 | VV | 192602 | 2089797 | 84. 20% | 7. 135% |
| 82 | 6. 804 | 6. 800 | 6. 810 | VV | 703    | 4133    | 0. 17%  | 0. 014% |
| 83 | 6. 811 | 6. 810 | 6. 824 | VV | 693    | 5359    | 0. 22%  | 0. 018% |
| 84 | 6. 833 | 6. 824 | 6. 881 | VV | 728    | 19600   | 0. 79%  | 0. 067% |
| 85 | 6. 896 | 6. 881 | 6. 904 | VV | 495    | 6137    | 0. 25%  | 0. 021% |
| 86 | 6. 907 | 6. 904 | 6. 919 | VV | 558    | 3967    | 0. 16%  | 0. 014% |
| 87 | 6. 920 | 6. 919 | 6. 934 | VV | 422    | 3420    | 0. 14%  | 0. 012% |
| 88 | 6. 938 | 6. 934 | 6. 956 | VV | 396    | 5076    | 0. 20%  | 0. 017% |
| 89 | 6. 961 | 6. 956 | 6. 983 | VV | 482    | 6104    | 0. 25%  | 0. 021% |

|     |        |        |        |    | rteres |         |         |         |
|-----|--------|--------|--------|----|--------|---------|---------|---------|
| 90  | 6. 986 | 6. 983 | 6. 993 | VV | 365    | 1936    | 0. 08%  | 0. 007% |
| 91  | 6. 999 | 6. 993 | 7. 010 | VV | 373    | 3327    | 0. 13%  | 0. 011% |
| 92  | 7. 017 | 7. 010 | 7. 027 | VV | 356    | 3158    | 0. 13%  | 0. 011% |
| 93  | 7. 032 | 7. 027 | 7. 059 | VV | 298    | 4818    | 0. 19%  | 0. 016% |
| 94  | 7. 073 | 7. 059 | 7. 086 | VV | 277    | 3432    | 0. 14%  | 0. 012% |
| 95  | 7. 092 | 7. 086 | 7. 108 | VV | 298    | 2796    | 0. 11%  | 0. 010% |
| 96  | 7. 110 | 7. 108 | 7. 122 | VV | 243    | 1516    | 0. 06%  | 0. 005% |
| 97  | 7. 132 | 7. 122 | 7. 167 | VV | 233    | 4853    | 0. 20%  | 0. 017% |
| 98  | 7. 198 | 7. 167 | 7. 205 | VV | 276    | 4314    | 0. 17%  | 0. 015% |
| 99  | 7. 240 | 7. 205 | 7. 271 | VV | 397    | 12853   | 0. 52%  | 0. 044% |
| 100 | 7. 276 | 7. 271 | 7. 284 | VV | 335    | 2434    | 0. 10%  | 0. 008% |
| 101 | 7. 285 | 7. 284 | 7. 291 | VV | 344    | 1333    | 0. 05%  | 0. 005% |
| 102 | 7. 299 | 7. 291 | 7. 340 | VV | 368    | 7970    | 0. 32%  | 0. 027% |
| 103 | 7. 365 | 7. 340 | 7. 390 | VV | 497    | 10890   | 0. 44%  | 0. 037% |
| 104 | 7. 397 | 7. 390 | 7. 444 | VV | 399    | 8116    | 0. 33%  | 0. 028% |
| 105 | 7. 462 | 7. 444 | 7. 497 | VV | 220    | 4977    | 0. 20%  | 0. 017% |
| 106 | 7. 502 | 7. 497 | 7. 531 | VV | 153    | 2226    | 0. 09%  | 0. 008% |
| 107 | 7. 545 | 7. 531 | 7. 550 | VV | 160    | 1292    | 0. 05%  | 0. 004% |
| 108 | 7. 560 | 7. 550 | 7. 599 | VV | 155    | 2652    | 0. 11%  | 0. 009% |
| 109 | 7. 610 | 7. 599 | 7. 613 | VV | 131    | 714     | 0. 03%  | 0. 002% |
| 110 | 7. 631 | 7. 613 | 7. 686 | VV | 505    | 8635    | 0. 35%  | 0. 029% |
| 111 | 7. 697 | 7. 686 | 7. 717 | PV | 140    | 1206    | 0. 05%  | 0. 004% |
| 112 | 7. 728 | 7. 717 | 7. 738 | VV | 118    | 847     | 0. 03%  | 0. 003% |
| 113 | 7. 743 | 7. 738 | 7. 747 | VV | 133    | 497     | 0. 02%  | 0. 002% |
| 114 | 7. 752 | 7. 747 | 7. 779 | VV | 95     | 1381    | 0. 06%  | 0. 005% |
| 115 | 7. 784 | 7. 779 | 7. 790 | VV | 100    | 473     | 0. 02%  | 0. 002% |
| 116 | 7. 798 | 7. 790 | 7. 809 | VV | 148    | 912     | 0. 04%  | 0. 003% |
| 117 | 7. 831 | 7. 809 | 7. 837 | VV | 122    | 1541    | 0. 06%  | 0. 005% |
| 118 | 7. 839 | 7. 837 | 7. 843 | VV | 92     | 213     | 0. 01%  | 0. 001% |
| 119 | 7. 847 | 7. 843 | 7. 865 | VV | 98     | 1002    | 0. 04%  | 0. 003% |
| 120 | 7. 870 | 7. 865 | 7. 886 | VV | 104    | 1042    | 0. 04%  | 0. 004% |
| 121 | 7. 912 | 7. 886 | 8. 011 | VV | 1317   | 21023   | 0. 85%  | 0. 072% |
| 122 | 8. 084 | 8. 011 | 8. 110 | VV | 1547   | 24188   | 0. 97%  | 0. 083% |
| 123 | 8. 115 | 8. 110 | 8. 146 | VV | 147    | 2144    | 0. 09%  | 0. 007% |
| 124 | 8. 162 | 8. 146 | 8. 174 | VV | 202    | 1676    | 0. 07%  | 0. 006% |
| 125 | 8. 204 | 8. 174 | 8. 234 | VV | 602    | 7828    | 0. 32%  | 0. 027% |
| 126 | 8. 262 | 8. 234 | 8. 292 | VV | 741    | 10255   | 0. 41%  | 0. 035% |
| 127 | 8. 296 | 8. 292 | 8. 313 | VV | 151    | 1254    | 0. 05%  | 0. 004% |
| 128 | 8. 317 | 8. 313 | 8. 327 | VV | 122    | 563     | 0. 02%  | 0. 002% |
| 129 | 8. 333 | 8. 327 | 8. 355 | VV | 100    | 1225    | 0. 05%  | 0. 004% |
| 130 | 8. 368 | 8. 355 | 8. 384 | VV | 168    | 1971    | 0. 08%  | 0. 007% |
| 131 | 8. 420 | 8. 384 | 8. 439 | VV | 338    | 6396    | 0. 26%  | 0. 022% |
| 132 | 8. 514 | 8. 439 | 8. 640 | VV | 190922 | 2187877 | 88. 15% | 7. 470% |
| 133 | 8. 652 | 8. 640 | 8. 687 | VV | 920    | 20589   | 0. 83%  | 0. 070% |
| 134 | 8. 696 | 8. 687 | 8. 702 | VV | 636    | 5328    | 0. 21%  | 0. 018% |
| 135 | 8. 704 | 8. 702 | 8. 708 | VV | 549    | 1754    | 0. 07%  | 0. 006% |
| 136 | 8. 711 | 8. 708 | 8. 739 | VV | 536    | 8733    | 0. 35%  | 0. 030% |
| 137 | 8. 748 | 8. 739 | 8. 766 | VV | 453    | 6214    | 0. 25%  | 0. 021% |
| 138 | 8. 772 | 8. 766 | 8. 787 | VV | 352    | 3811    | 0. 15%  | 0. 013% |
| 139 | 8. 793 | 8. 787 | 8. 799 | VV | 284    | 1741    | 0. 07%  | 0. 006% |
| 140 | 8. 802 | 8. 799 | 8. 815 | VV | 265    | 2257    | 0. 09%  | 0. 008% |
| 141 | 8. 848 | 8. 815 | 8. 864 | VV | 514    | 11648   | 0. 47%  | 0. 040% |

|     |         |         |         |    | rteres |         |         |         |
|-----|---------|---------|---------|----|--------|---------|---------|---------|
| 142 | 8. 874  | 8. 864  | 8. 907  | VV | 463    | 9507    | 0. 38%  | 0. 032% |
| 143 | 8. 948  | 8. 907  | 8. 971  | VV | 494    | 11631   | 0. 47%  | 0. 040% |
| 144 | 8. 973  | 8. 971  | 8. 978  | VV | 254    | 1026    | 0. 04%  | 0. 004% |
| 145 | 9. 002  | 8. 978  | 9. 041  | VV | 476    | 12385   | 0. 50%  | 0. 042% |
| 146 | 9. 058  | 9. 041  | 9. 086  | VV | 335    | 6555    | 0. 26%  | 0. 022% |
| 147 | 9. 089  | 9. 086  | 9. 097  | VV | 182    | 1071    | 0. 04%  | 0. 004% |
| 148 | 9. 113  | 9. 097  | 9. 122  | VV | 182    | 2293    | 0. 09%  | 0. 008% |
| 149 | 9. 140  | 9. 122  | 9. 146  | VV | 234    | 2842    | 0. 11%  | 0. 010% |
| 150 | 9. 149  | 9. 146  | 9. 153  | VV | 235    | 900     | 0. 04%  | 0. 003% |
| 151 | 9. 161  | 9. 153  | 9. 194  | VV | 313    | 4480    | 0. 18%  | 0. 015% |
| 152 | 9. 199  | 9. 194  | 9. 206  | VV | 209    | 1245    | 0. 05%  | 0. 004% |
| 153 | 9. 211  | 9. 206  | 9. 225  | VV | 200    | 2146    | 0. 09%  | 0. 007% |
| 154 | 9. 247  | 9. 225  | 9. 288  | VV | 595    | 13421   | 0. 54%  | 0. 046% |
| 155 | 9. 292  | 9. 288  | 9. 306  | VV | 197    | 1271    | 0. 05%  | 0. 004% |
| 156 | 9. 314  | 9. 306  | 9. 325  | VV | 156    | 1369    | 0. 06%  | 0. 005% |
| 157 | 9. 345  | 9. 325  | 9. 371  | VV | 541    | 7975    | 0. 32%  | 0. 027% |
| 158 | 9. 398  | 9. 371  | 9. 423  | VV | 495    | 6250    | 0. 25%  | 0. 021% |
| 159 | 9. 428  | 9. 423  | 9. 444  | VV | 99     | 753     | 0. 03%  | 0. 003% |
| 160 | 9. 448  | 9. 444  | 9. 487  | VB | 90     | 962     | 0. 04%  | 0. 003% |
| 161 | 9. 532  | 9. 497  | 9. 569  | BV | 262    | 2937    | 0. 12%  | 0. 010% |
| 162 | 9. 582  | 9. 569  | 9. 591  | PV | 86     | 572     | 0. 02%  | 0. 002% |
| 163 | 9. 596  | 9. 591  | 9. 601  | VV | 89     | 287     | 0. 01%  | 0. 001% |
| 164 | 9. 607  | 9. 601  | 9. 628  | VV | 66     | 713     | 0. 03%  | 0. 002% |
| 165 | 9. 652  | 9. 628  | 9. 662  | PV | 565    | 6809    | 0. 27%  | 0. 023% |
| 166 | 9. 674  | 9. 662  | 9. 689  | VV | 775    | 8765    | 0. 35%  | 0. 030% |
| 167 | 9. 728  | 9. 689  | 9. 750  | VV | 612    | 16941   | 0. 68%  | 0. 058% |
| 168 | 9. 762  | 9. 750  | 9. 804  | VV | 346    | 7408    | 0. 30%  | 0. 025% |
| 169 | 9. 808  | 9. 804  | 9. 832  | VV | 234    | 2664    | 0. 11%  | 0. 009% |
| 170 | 9. 841  | 9. 832  | 9. 845  | VV | 190    | 1050    | 0. 04%  | 0. 004% |
| 171 | 9. 860  | 9. 845  | 9. 872  | VV | 237    | 2886    | 0. 12%  | 0. 010% |
| 172 | 9. 878  | 9. 872  | 9. 884  | VV | 172    | 1098    | 0. 04%  | 0. 004% |
| 173 | 9. 905  | 9. 884  | 9. 929  | VV | 939    | 11492   | 0. 46%  | 0. 039% |
| 174 | 9. 961  | 9. 929  | 9. 975  | VV | 792    | 9874    | 0. 40%  | 0. 034% |
| 175 | 10. 000 | 9. 975  | 10. 097 | VV | 30635  | 601238  | 24. 22% | 2. 053% |
| 176 | 10. 127 | 10. 097 | 10. 224 | VV | 204163 | 2385129 | 96. 09% | 8. 143% |
| 177 | 10. 231 | 10. 224 | 10. 286 | VV | 958    | 24891   | 1. 00%  | 0. 085% |
| 178 | 10. 294 | 10. 286 | 10. 324 | VV | 447    | 7945    | 0. 32%  | 0. 027% |
| 179 | 10. 329 | 10. 324 | 10. 339 | VV | 263    | 1837    | 0. 07%  | 0. 006% |
| 180 | 10. 352 | 10. 339 | 10. 373 | VV | 218    | 3543    | 0. 14%  | 0. 012% |
| 181 | 10. 378 | 10. 373 | 10. 384 | VV | 167    | 979     | 0. 04%  | 0. 003% |
| 182 | 10. 390 | 10. 384 | 10. 402 | VV | 161    | 1482    | 0. 06%  | 0. 005% |
| 183 | 10. 407 | 10. 402 | 10. 424 | VV | 149    | 1367    | 0. 06%  | 0. 005% |
| 184 | 10. 470 | 10. 424 | 10. 538 | VV | 3178   | 55876   | 2. 25%  | 0. 191% |
| 185 | 10. 547 | 10. 538 | 10. 567 | VV | 330    | 4967    | 0. 20%  | 0. 017% |
| 186 | 10. 574 | 10. 567 | 10. 589 | VV | 342    | 3129    | 0. 13%  | 0. 011% |
| 187 | 10. 594 | 10. 589 | 10. 598 | VV | 209    | 1099    | 0. 04%  | 0. 004% |
| 188 | 10. 614 | 10. 598 | 10. 628 | VV | 249    | 3454    | 0. 14%  | 0. 012% |
| 189 | 10. 645 | 10. 628 | 10. 666 | VV | 473    | 5476    | 0. 22%  | 0. 019% |
| 190 | 10. 687 | 10. 666 | 10. 716 | VV | 401    | 6887    | 0. 28%  | 0. 024% |
| 191 | 10. 720 | 10. 716 | 10. 736 | VV | 175    | 1375    | 0. 06%  | 0. 005% |
| 192 | 10. 754 | 10. 736 | 10. 779 | VV | 298    | 4957    | 0. 20%  | 0. 017% |
| 193 | 10. 795 | 10. 779 | 10. 811 | VV | 174    | 2771    | 0. 11%  | 0. 009% |
| 194 | 10. 834 | 10. 811 | 10. 855 | VV | 535    | 10398   | 0. 42%  | 0. 035% |

|     |        |        |        |    | nteres |         |         |        |  |
|-----|--------|--------|--------|----|--------|---------|---------|--------|--|
| 195 | 10.868 | 10.855 | 10.906 | VV | 511    | 8095    | 0.33%   | 0.028% |  |
| 196 | 10.929 | 10.906 | 10.934 | VV | 173    | 2202    | 0.09%   | 0.008% |  |
| 197 | 10.942 | 10.934 | 10.957 | VV | 247    | 2261    | 0.09%   | 0.008% |  |
| 198 | 10.971 | 10.957 | 10.993 | VV | 300    | 4520    | 0.18%   | 0.015% |  |
| 199 | 10.997 | 10.993 | 11.031 | VV | 227    | 3059    | 0.12%   | 0.010% |  |
| 200 | 11.053 | 11.031 | 11.070 | VV | 155    | 2075    | 0.08%   | 0.007% |  |
| 201 | 11.095 | 11.070 | 11.119 | VV | 410    | 7080    | 0.29%   | 0.024% |  |
| 202 | 11.162 | 11.119 | 11.178 | VV | 1067   | 23596   | 0.95%   | 0.081% |  |
| 203 | 11.185 | 11.178 | 11.232 | VV | 784    | 15659   | 0.63%   | 0.053% |  |
| 204 | 11.246 | 11.232 | 11.281 | VV | 539    | 10319   | 0.42%   | 0.035% |  |
| 205 | 11.293 | 11.281 | 11.314 | VV | 279    | 5119    | 0.21%   | 0.017% |  |
| 206 | 11.321 | 11.314 | 11.356 | VV | 308    | 5100    | 0.21%   | 0.017% |  |
| 207 | 11.360 | 11.356 | 11.369 | VV | 100    | 684     | 0.03%   | 0.002% |  |
| 208 | 11.400 | 11.369 | 11.417 | VV | 337    | 5322    | 0.21%   | 0.018% |  |
| 209 | 11.423 | 11.417 | 11.426 | PV | 99     | 415     | 0.02%   | 0.001% |  |
| 210 | 11.434 | 11.426 | 11.440 | VV | 221    | 1420    | 0.06%   | 0.005% |  |
| 211 | 11.446 | 11.440 | 11.449 | VV | 224    | 1035    | 0.04%   | 0.004% |  |
| 212 | 11.455 | 11.449 | 11.482 | VV | 297    | 3509    | 0.14%   | 0.012% |  |
| 213 | 11.505 | 11.482 | 11.527 | VV | 232    | 4061    | 0.16%   | 0.014% |  |
| 214 | 11.531 | 11.527 | 11.534 | VV | 161    | 597     | 0.02%   | 0.002% |  |
| 215 | 11.576 | 11.534 | 11.634 | VV | 214676 | 2482060 | 100.00% | 8.474% |  |
| 216 | 11.653 | 11.634 | 11.696 | VV | 871    | 16616   | 0.67%   | 0.057% |  |
| 217 | 11.701 | 11.696 | 11.704 | VV | 124    | 557     | 0.02%   | 0.002% |  |
| 218 | 11.735 | 11.704 | 11.752 | VV | 514    | 7890    | 0.32%   | 0.027% |  |
| 219 | 11.769 | 11.752 | 11.796 | VV | 609    | 7226    | 0.29%   | 0.025% |  |
| 220 | 11.821 | 11.796 | 11.836 | PV | 633    | 8111    | 0.33%   | 0.028% |  |
| 221 | 11.864 | 11.836 | 11.919 | VV | 522    | 15860   | 0.64%   | 0.054% |  |
| 222 | 11.924 | 11.919 | 11.946 | VV | 209    | 2510    | 0.10%   | 0.009% |  |
| 223 | 11.990 | 11.946 | 12.039 | VV | 1281   | 31503   | 1.27%   | 0.108% |  |
| 224 | 12.057 | 12.039 | 12.079 | VV | 610    | 9427    | 0.38%   | 0.032% |  |
| 225 | 12.101 | 12.079 | 12.120 | VV | 310    | 5089    | 0.21%   | 0.017% |  |
| 226 | 12.124 | 12.120 | 12.128 | VV | 226    | 830     | 0.03%   | 0.003% |  |
| 227 | 12.131 | 12.128 | 12.184 | VV | 189    | 2446    | 0.10%   | 0.008% |  |
| 228 | 12.195 | 12.184 | 12.207 | VV | 104    | 957     | 0.04%   | 0.003% |  |
| 229 | 12.250 | 12.207 | 12.274 | PV | 511    | 10156   | 0.41%   | 0.035% |  |
| 230 | 12.304 | 12.274 | 12.324 | VV | 393    | 6009    | 0.24%   | 0.021% |  |
| 231 | 12.350 | 12.324 | 12.411 | VV | 802    | 23460   | 0.95%   | 0.080% |  |
| 232 | 12.425 | 12.411 | 12.430 | VV | 338    | 3056    | 0.12%   | 0.010% |  |
| 233 | 12.439 | 12.430 | 12.444 | VV | 281    | 2045    | 0.08%   | 0.007% |  |
| 234 | 12.459 | 12.444 | 12.475 | VV | 316    | 4641    | 0.19%   | 0.016% |  |
| 235 | 12.505 | 12.475 | 12.555 | VV | 26018  | 315619  | 12.72%  | 1.078% |  |
| 236 | 12.572 | 12.555 | 12.588 | VV | 1045   | 16984   | 0.68%   | 0.058% |  |
| 237 | 12.603 | 12.588 | 12.631 | VV | 865    | 16792   | 0.68%   | 0.057% |  |
| 238 | 12.634 | 12.631 | 12.645 | VV | 545    | 4347    | 0.18%   | 0.015% |  |
| 239 | 12.659 | 12.645 | 12.682 | VV | 582    | 11237   | 0.45%   | 0.038% |  |
| 240 | 12.688 | 12.682 | 12.691 | VV | 393    | 2055    | 0.08%   | 0.007% |  |
| 241 | 12.714 | 12.691 | 12.731 | VV | 556    | 10413   | 0.42%   | 0.036% |  |
| 242 | 12.748 | 12.731 | 12.779 | VV | 595    | 9980    | 0.40%   | 0.034% |  |
| 243 | 12.813 | 12.779 | 12.856 | VV | 618    | 16210   | 0.65%   | 0.055% |  |
| 244 | 12.890 | 12.856 | 12.936 | VV | 206145 | 2452110 | 98.79%  | 8.372% |  |
| 245 | 12.967 | 12.936 | 13.076 | VV | 2668   | 69532   | 2.80%   | 0.237% |  |
| 246 | 13.097 | 13.076 | 13.122 | VV | 329    | 6449    | 0.26%   | 0.022% |  |

|     |         |         |         |    | rteres |         |         |         |
|-----|---------|---------|---------|----|--------|---------|---------|---------|
| 247 | 13. 145 | 13. 122 | 13. 151 | VV | 395    | 5451    | 0. 22%  | 0. 019% |
| 248 | 13. 154 | 13. 151 | 13. 184 | VV | 340    | 4181    | 0. 17%  | 0. 014% |
| 249 | 13. 195 | 13. 184 | 13. 198 | VV | 215    | 1513    | 0. 06%  | 0. 005% |
| 250 | 13. 201 | 13. 198 | 13. 224 | VV | 199    | 2153    | 0. 09%  | 0. 007% |
| 251 | 13. 231 | 13. 224 | 13. 234 | VV | 97     | 405     | 0. 02%  | 0. 001% |
| 252 | 13. 301 | 13. 234 | 13. 361 | PV | 1578   | 55710   | 2. 24%  | 0. 190% |
| 253 | 13. 383 | 13. 361 | 13. 411 | VV | 641    | 12190   | 0. 49%  | 0. 042% |
| 254 | 13. 415 | 13. 411 | 13. 482 | VV | 380    | 10315   | 0. 42%  | 0. 035% |
| 255 | 13. 502 | 13. 482 | 13. 539 | VV | 783    | 14727   | 0. 59%  | 0. 050% |
| 256 | 13. 562 | 13. 539 | 13. 596 | VV | 432    | 10282   | 0. 41%  | 0. 035% |
| 257 | 13. 602 | 13. 596 | 13. 609 | VV | 241    | 1778    | 0. 07%  | 0. 006% |
| 258 | 13. 630 | 13. 609 | 13. 653 | VV | 425    | 7274    | 0. 29%  | 0. 025% |
| 259 | 13. 663 | 13. 653 | 13. 691 | VV | 205    | 3679    | 0. 15%  | 0. 013% |
| 260 | 13. 720 | 13. 691 | 13. 730 | VV | 963    | 14855   | 0. 60%  | 0. 051% |
| 261 | 13. 743 | 13. 730 | 13. 766 | VV | 868    | 14369   | 0. 58%  | 0. 049% |
| 262 | 13. 786 | 13. 766 | 13. 816 | VV | 1476   | 20695   | 0. 83%  | 0. 071% |
| 263 | 13. 821 | 13. 816 | 13. 837 | VV | 162    | 1660    | 0. 07%  | 0. 006% |
| 264 | 13. 913 | 13. 837 | 13. 919 | VV | 609    | 16651   | 0. 67%  | 0. 057% |
| 265 | 13. 931 | 13. 919 | 13. 972 | VV | 902    | 16505   | 0. 66%  | 0. 056% |
| 266 | 13. 989 | 13. 972 | 14. 001 | VV | 365    | 5305    | 0. 21%  | 0. 018% |
| 267 | 14. 010 | 14. 001 | 14. 014 | VV | 358    | 2628    | 0. 11%  | 0. 009% |
| 268 | 14. 044 | 14. 014 | 14. 060 | VV | 3035   | 40888   | 1. 65%  | 0. 140% |
| 269 | 14. 092 | 14. 060 | 14. 171 | VV | 193799 | 2448890 | 98. 66% | 8. 361% |
| 270 | 14. 206 | 14. 171 | 14. 237 | VV | 1017   | 21311   | 0. 86%  | 0. 073% |
| 271 | 14. 241 | 14. 237 | 14. 270 | VV | 237    | 3951    | 0. 16%  | 0. 013% |
| 272 | 14. 275 | 14. 270 | 14. 281 | VV | 237    | 1206    | 0. 05%  | 0. 004% |
| 273 | 14. 303 | 14. 281 | 14. 323 | VV | 380    | 7221    | 0. 29%  | 0. 025% |
| 274 | 14. 329 | 14. 323 | 14. 339 | VV | 336    | 2970    | 0. 12%  | 0. 010% |
| 275 | 14. 343 | 14. 339 | 14. 357 | VV | 351    | 3310    | 0. 13%  | 0. 011% |
| 276 | 14. 360 | 14. 357 | 14. 393 | VV | 360    | 5916    | 0. 24%  | 0. 020% |
| 277 | 14. 401 | 14. 393 | 14. 434 | VV | 302    | 5467    | 0. 22%  | 0. 019% |
| 278 | 14. 456 | 14. 434 | 14. 462 | VV | 502    | 6349    | 0. 26%  | 0. 022% |
| 279 | 14. 492 | 14. 462 | 14. 556 | VV | 2487   | 58497   | 2. 36%  | 0. 200% |
| 280 | 14. 594 | 14. 556 | 14. 626 | VV | 468    | 13295   | 0. 54%  | 0. 045% |
| 281 | 14. 654 | 14. 626 | 14. 667 | VV | 1246   | 17320   | 0. 70%  | 0. 059% |
| 282 | 14. 679 | 14. 667 | 14. 697 | VV | 1181   | 18365   | 0. 74%  | 0. 063% |
| 283 | 14. 721 | 14. 697 | 14. 749 | VV | 7067   | 114107  | 4. 60%  | 0. 390% |
| 284 | 14. 756 | 14. 749 | 14. 796 | VV | 2229   | 36550   | 1. 47%  | 0. 125% |
| 285 | 14. 808 | 14. 796 | 14. 836 | VV | 734    | 13217   | 0. 53%  | 0. 045% |
| 286 | 14. 852 | 14. 836 | 14. 859 | VV | 424    | 5014    | 0. 20%  | 0. 017% |
| 287 | 14. 888 | 14. 859 | 14. 956 | VV | 1363   | 33383   | 1. 34%  | 0. 114% |
| 288 | 14. 993 | 14. 956 | 15. 031 | VV | 105247 | 1431105 | 57. 66% | 4. 886% |
| 289 | 15. 051 | 15. 031 | 15. 095 | VV | 1154   | 27068   | 1. 09%  | 0. 092% |
| 290 | 15. 098 | 15. 095 | 15. 128 | VV | 338    | 3518    | 0. 14%  | 0. 012% |
| 291 | 15. 198 | 15. 128 | 15. 228 | VV | 191874 | 2469844 | 99. 51% | 8. 432% |
| 292 | 15. 243 | 15. 228 | 15. 307 | VV | 4925   | 73784   | 2. 97%  | 0. 252% |
| 293 | 15. 311 | 15. 307 | 15. 315 | VV | 304    | 1128    | 0. 05%  | 0. 004% |
| 294 | 15. 322 | 15. 315 | 15. 327 | VV | 235    | 1593    | 0. 06%  | 0. 005% |
| 295 | 15. 332 | 15. 327 | 15. 337 | VV | 262    | 964     | 0. 04%  | 0. 003% |
| 296 | 15. 345 | 15. 337 | 15. 367 | VV | 186    | 1904    | 0. 08%  | 0. 007% |
| 297 | 15. 394 | 15. 367 | 15. 420 | PV | 376    | 5947    | 0. 24%  | 0. 020% |
| 298 | 15. 428 | 15. 420 | 15. 432 | VV | 114    | 622     | 0. 03%  | 0. 002% |
| 299 | 15. 456 | 15. 432 | 15. 474 | VV | 200    | 2205    | 0. 09%  | 0. 008% |

|     |        |        |        |     | rteres |         |        |        |
|-----|--------|--------|--------|-----|--------|---------|--------|--------|
| 300 | 15.510 | 15.474 | 15.516 | VV  | 203    | 2190    | 0.09%  | 0.007% |
| 301 | 15.529 | 15.516 | 15.533 | VV  | 161    | 1411    | 0.06%  | 0.005% |
| 302 | 15.536 | 15.533 | 15.547 | VV  | 199    | 1059    | 0.04%  | 0.004% |
| 303 | 15.580 | 15.547 | 15.656 | VV  | 45695  | 852467  | 34.35% | 2.910% |
| 304 | 15.675 | 15.656 | 15.696 | VV  | 1366   | 22108   | 0.89%  | 0.075% |
| 305 | 15.719 | 15.696 | 15.756 | VV  | 2732   | 44895   | 1.81%  | 0.153% |
| 306 | 15.782 | 15.756 | 15.812 | VV  | 1152   | 20620   | 0.83%  | 0.070% |
| 307 | 15.819 | 15.812 | 15.824 | VV  | 168    | 925     | 0.04%  | 0.003% |
| 308 | 15.850 | 15.824 | 15.879 | VV  | 460    | 8640    | 0.35%  | 0.029% |
| 309 | 15.900 | 15.879 | 15.921 | VV  | 293    | 4102    | 0.17%  | 0.014% |
| 310 | 15.941 | 15.921 | 15.951 | PV  | 139    | 1539    | 0.06%  | 0.005% |
| 311 | 16.013 | 15.951 | 16.034 | VV  | 568    | 16966   | 0.68%  | 0.058% |
| 312 | 16.039 | 16.034 | 16.071 | VV  | 441    | 6059    | 0.24%  | 0.021% |
| 313 | 16.105 | 16.071 | 16.156 | VV  | 1979   | 43820   | 1.77%  | 0.150% |
| 314 | 16.222 | 16.156 | 16.264 | VV  | 184900 | 2433053 | 98.03% | 8.307% |
| 315 | 16.283 | 16.264 | 16.322 | VV  | 2876   | 43081   | 1.74%  | 0.147% |
| 316 | 16.325 | 16.322 | 16.343 | VV  | 163    | 1466    | 0.06%  | 0.005% |
| 317 | 16.359 | 16.343 | 16.381 | VV  | 252    | 3775    | 0.15%  | 0.013% |
| 318 | 16.427 | 16.381 | 16.443 | PV  | 345    | 7329    | 0.30%  | 0.025% |
| 319 | 16.447 | 16.443 | 16.459 | VV  | 212    | 1570    | 0.06%  | 0.005% |
| 320 | 16.463 | 16.459 | 16.488 | VV  | 210    | 2162    | 0.09%  | 0.007% |
| 321 | 16.519 | 16.488 | 16.528 | VV  | 584    | 8749    | 0.35%  | 0.030% |
| 322 | 16.532 | 16.528 | 16.554 | VV  | 507    | 6476    | 0.26%  | 0.022% |
| 323 | 16.560 | 16.554 | 16.567 | VV  | 365    | 2769    | 0.11%  | 0.009% |
| 324 | 16.601 | 16.567 | 16.645 | VV  | 10789  | 212922  | 8.58%  | 0.727% |
| 325 | 16.658 | 16.645 | 16.667 | VV  | 1614   | 20768   | 0.84%  | 0.071% |
| 326 | 16.682 | 16.667 | 16.686 | VV  | 1671   | 17550   | 0.71%  | 0.060% |
| 327 | 16.705 | 16.686 | 16.731 | VV  | 4048   | 59859   | 2.41%  | 0.204% |
| 328 | 16.781 | 16.731 | 16.819 | VV  | 1454   | 38136   | 1.54%  | 0.130% |
| 329 | 16.821 | 16.819 | 16.824 | VV  | 184    | 535     | 0.02%  | 0.002% |
| 330 | 16.844 | 16.824 | 16.861 | VV  | 448    | 6178    | 0.25%  | 0.021% |
| 331 | 16.865 | 16.861 | 16.889 | VV  | 368    | 4171    | 0.17%  | 0.014% |
| 332 | 16.894 | 16.889 | 16.898 | VV  | 206    | 875     | 0.04%  | 0.003% |
| 333 | 16.903 | 16.898 | 16.910 | VV  | 200    | 1112    | 0.04%  | 0.004% |
| 334 | 16.924 | 16.910 | 16.931 | VV  | 114    | 1240    | 0.05%  | 0.004% |
| 335 | 16.979 | 16.931 | 17.030 | PV  | 1139   | 33088   | 1.33%  | 0.113% |
| 336 | 17.082 | 17.030 | 17.114 | VV  | 1365   | 44850   | 1.81%  | 0.153% |
| 337 | 17.175 | 17.114 | 17.209 | VV  | 176001 | 2428896 | 97.86% | 8.292% |
| 338 | 17.219 | 17.209 | 17.231 | VV  | 1096   | 12580   | 0.51%  | 0.043% |
| 339 | 17.251 | 17.231 | 17.284 | VV  | 2328   | 36395   | 1.47%  | 0.124% |
| 340 | 17.298 | 17.284 | 17.314 | VV  | 306    | 3502    | 0.14%  | 0.012% |
| 341 | 17.322 | 17.314 | 17.327 | VV  | 54     | 554     | 0.02%  | 0.002% |
| 342 | 17.331 | 17.327 | 17.335 | VV  | 96     | 273     | 0.01%  | 0.001% |
| 343 | 17.343 | 17.335 | 17.349 | VV  | 122    | 384     | 0.02%  | 0.001% |
| 344 | 17.356 | 17.349 | 17.362 | PV  | 108    | 522     | 0.02%  | 0.002% |
| 345 | 17.388 | 17.362 | 17.401 | PBA | 125    | 3016    | 0.12%  | 0.010% |

Sum of corrected areas: 29290555

FG042425.M Wed May 14 05:37:13 2025

### Manual Integration Report

| Sample ID | ClientID ID | File ID    | Sequence ID | Parameter                | Supervised By | Supervised On        | Reason                                  |
|-----------|-------------|------------|-------------|--------------------------|---------------|----------------------|---|
| Q1872-14  |             | FG015822.D | FG051325    | TETRACOSANE-d50 (SURROGA | mohammad      | 5/15/2025 3:42:38 AM | Peak Integrated by Software incorrectly |
| Q1872-14  |             | FG015823.D | FG051325    | TETRACOSANE-d50 (SURROGA | mohammad      | 5/15/2025 3:42:38 AM | Peak Integrated by Software incorrectly |
|           |             |            |             |                          |               |                      |   |

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Instrument ID: FID\_G

Daily Analysis Runlog For Sequence/QC Batch ID # FG042425

|  |   |                   |                       |          |  |
|--|---|-------------------|-----------------------|----------|--|
| Review By  | yogesh                                  | Review On         | 4/24/2025 12:59:08 PM |          |  |
| Supervise By   | mohammad                                | Supervise On      | 4/26/2025 2:19:49 AM  |          |  |
| SubDirectory   | FG042425                                | HP Acquire Method | HP Processing Method  | FG042425 |  |
| <b>STD. NAME</b>   | <b>STD REF.#</b>                        |                   |                       |          |  |
| Tune/Reschk<br>Initial Calibration Stds  | PP24467,PP24469,PP24470,PP24471,PP24472 |                   |                       |          |  |
| CCC<br>Internal Standard/PEM<br>ICV/I.BLK<br>Surrogate Standard<br>MS/MSD Standard<br>LCS Standard | PP24468,PP24473                         |                   |                       |          |  |

| Sr# | SampleId     | Data File Name | Date-Time         | Operator | Status |
|-----|--------------|----------------|-------------------|----------|--------|
| 1   | MECL2        | FG015754.D     | 24 Apr 2025 09:50 | YPIAJ    | Ok     |
| 2   | I.BLK        | FG015755.D     | 24 Apr 2025 10:19 | YPIAJ    | Ok     |
| 3   | 100 TRPH STD | FG015756.D     | 24 Apr 2025 10:48 | YPIAJ    | Ok     |
| 4   | 50 TRPH STD  | FG015757.D     | 24 Apr 2025 11:17 | YPIAJ    | Ok     |
| 5   | 20 TRPH STD  | FG015758.D     | 24 Apr 2025 11:46 | YPIAJ    | Ok     |
| 6   | 10 TRPH STD  | FG015759.D     | 24 Apr 2025 12:16 | YPIAJ    | Ok     |
| 7   | 5 TRPH STD   | FG015760.D     | 24 Apr 2025 12:45 | YPIAJ    | Ok     |
| 8   | FG042225ICV  | FG015761.D     | 24 Apr 2025 13:14 | YPIAJ    | Ok     |

M : Manual Integration

Instrument ID: FID\_G

Daily Analysis Runlog For Sequence/QC Batch ID # FG051325

|  |   |                   |                       |          |  |
|--|---|-------------------|-----------------------|----------|--|
| Review By  | yogesh                                  | Review On         | 5/13/2025 11:25:05 AM |          |  |
| Supervise By   | mohammad                                | Supervise On      | 5/15/2025 3:42:38 AM  |          |  |
| SubDirectory   | FG051325                                | HP Acquire Method | HP Processing Method  | FG042425 |  |
| <b>STD. NAME</b>   | <b>STD REF.#</b>                        |                   |                       |          |  |
| Tune/Reschk<br>Initial Calibration Stds                            | PP24467,PP24469,PP24470,PP24471,PP24472 |                   |                       |          |  |
| CCC<br>Internal Standard/PEM                                       | PP24469                                 |                   |                       |          |  |
| ICV/I.BLK<br>Surrogate Standard<br>MS/MSD Standard<br>LCS Standard | PP24468,PP24473                         |                   |                       |          |  |

| Sr# | SampleId        | Data File Name | Date-Time         | Operator | Status   |
|-----|-----------------|----------------|-------------------|----------|----------|
| 1   | MECL2           | FG015816.D     | 13 May 2025 10:42 | YPIAJ    | Ok       |
| 2   | I.BLK           | FG015817.D     | 13 May 2025 11:11 | YPIAJ    | Ok       |
| 3   | 50 PPM TRPH STD | FG015818.D     | 13 May 2025 11:40 | YPIAJ    | Ok       |
| 4   | RT MARKER       | FG015819.D     | 13 May 2025 12:13 | YPIAJ    | Ok       |
| 5   | PB167975BL      | FG015820.D     | 13 May 2025 13:22 | YPIAJ    | Ok       |
| 6   | PB167975BS      | FG015821.D     | 13 May 2025 13:51 | YPIAJ    | Ok       |
| 7   | Q1872-14        | FG015822.D     | 13 May 2025 14:38 | YPIAJ    | Dilution |
| 8   | Q1872-14        | FG015823.D     | 13 May 2025 15:25 | YPIAJ    | Ok,M     |
| 9   | I.BLK           | FG015824.D     | 13 May 2025 15:54 | YPIAJ    | Ok       |
| 10  | 50 PPM TRPH STD | FG015825.D     | 13 May 2025 16:53 | YPIAJ    | Ok       |
| 11  | Q1956-01        | FG015826.D     | 13 May 2025 17:22 | YPIAJ    | Ok       |
| 12  | Q1956-02        | FG015827.D     | 13 May 2025 17:51 | YPIAJ    | Ok       |
| 13  | Q1956-03MS      | FG015828.D     | 13 May 2025 18:21 | YPIAJ    | Ok       |
| 14  | Q1956-04MSD     | FG015829.D     | 13 May 2025 18:50 | YPIAJ    | Ok       |
| 15  | Q1956-06        | FG015830.D     | 13 May 2025 19:19 | YPIAJ    | Ok       |
| 16  | Q1982-01        | FG015831.D     | 13 May 2025 19:49 | YPIAJ    | Ok       |
| 17  | Q1982-02        | FG015832.D     | 13 May 2025 20:18 | YPIAJ    | Ok       |
| 18  | Q1982-03        | FG015833.D     | 13 May 2025 20:47 | YPIAJ    | Ok       |
| 19  | I.BLK           | FG015834.D     | 13 May 2025 21:16 | YPIAJ    | Ok       |
| 20  | 50 PPM TRPH STD | FG015835.D     | 13 May 2025 21:46 | YPIAJ    | Ok       |
| 21  | Q2010-01        | FG015836.D     | 13 May 2025 22:44 | YPIAJ    | Ok       |

Instrument ID: FID\_G

Daily Analysis Runlog For Sequence/QC Batch ID # FG051325

| Review By  | yogesh                                  | Review On         | 5/13/2025 11:25:05 AM |          |  |
|--|---|-------------------|-----------------------|----------|--|
| Supervise By   | mohammad                                | Supervise On      | 5/15/2025 3:42:38 AM  |          |  |
| SubDirectory   | FG051325                                | HP Acquire Method | HP Processing Method  | FG042425 |  |
| STD. NAME  | STD REF.#                               |                   |                       |          |  |
| Tune/Reschk<br>Initial Calibration Stds                            | PP24467,PP24469,PP24470,PP24471,PP24472 |                   |                       |          |  |
| CCC<br>Internal Standard/PEM                                       | PP24469                                 |                   |                       |          |  |
| ICV/I.BLK<br>Surrogate Standard<br>MS/MSD Standard<br>LCS Standard | PP24468,PP24473                         |                   |                       |          |  |

|    |                 |            |                   |       |    |
|----|-----------------|------------|-------------------|-------|----|
| 22 | Q2010-02        | FG015837.D | 13 May 2025 23:14 | YPIAJ | Ok |
| 23 | Q2010-03        | FG015838.D | 13 May 2025 23:43 | YPIAJ | Ok |
| 24 | Q2010-04        | FG015839.D | 14 May 2025 00:12 | YPIAJ | Ok |
| 25 | I.BLK           | FG015840.D | 14 May 2025 00:41 | YPIAJ | Ok |
| 26 | 50 PPM TRPH STD | FG015841.D | 14 May 2025 01:10 | YPIAJ | Ok |

M : Manual Integration

Instrument ID: FID\_G

**Daily Analysis Runlog For Sequence/QC Batch ID # FG042425**

|              |          |                   |                               |
|--------------|----------|-------------------|-------------------------------|
| Review By    | yogesh   | Review On         | 4/24/2025 12:59:08 PM         |
| Supervise By | mohammad | Supervise On      | 4/26/2025 2:19:49 AM          |
| SubDirectory | FG042425 | HP Acquire Method | HP Processing Method FG042425 |

| STD. NAME  | STD REF.#                               |
|--|---|
| Tune/Reschk<br>Initial Calibration Stds  | PP24467,PP24469,PP24470,PP24471,PP24472 |
| CCC<br>Internal Standard/PEM<br>ICV/I.BLK<br>Surrogate Standard<br>MS/MSD Standard<br>LCS Standard | PP24468,PP24473                         |

| Sr# | SampleID     | ClientID | Data File Name | Date-Time         | Comment | Operator | Status |
|-----|--------------|----------|----------------|-------------------|---------|----------|--------|
| 1   | MECL2        |          | FG015754.D     | 24 Apr 2025 09:50 |         | YPIAJ    | Ok     |
| 2   | I.BLK        |          | FG015755.D     | 24 Apr 2025 10:19 |         | YPIAJ    | Ok     |
| 3   | 100 TRPH STD |          | FG015756.D     | 24 Apr 2025 10:48 |         | YPIAJ    | Ok     |
| 4   | 50 TRPH STD  |          | FG015757.D     | 24 Apr 2025 11:17 |         | YPIAJ    | Ok     |
| 5   | 20 TRPH STD  |          | FG015758.D     | 24 Apr 2025 11:46 |         | YPIAJ    | Ok     |
| 6   | 10 TRPH STD  |          | FG015759.D     | 24 Apr 2025 12:16 |         | YPIAJ    | Ok     |
| 7   | 5 TRPH STD   |          | FG015760.D     | 24 Apr 2025 12:45 |         | YPIAJ    | Ok     |
| 8   | FG042225ICV  |          | FG015761.D     | 24 Apr 2025 13:14 |         | YPIAJ    | Ok     |

M : Manual Integration

Instrument ID: FID\_G

**Daily Analysis Runlog For Sequence/QC Batch ID # FG051325**

|              |          |                   |                               |
|--------------|----------|-------------------|-------------------------------|
| Review By    | yogesh   | Review On         | 5/13/2025 11:25:05 AM         |
| Supervise By | mohammad | Supervise On      | 5/15/2025 3:42:38 AM          |
| SubDirectory | FG051325 | HP Acquire Method | HP Processing Method FG042425 |

| STD. NAME   | STD REF.#                               |
|---|---|
| Tune/Reschk<br>Initial Calibration Stds   | PP24467,PP24469,PP24470,PP24471,PP24472 |
| CCC   | PP24469                                 |
| Internal Standard/PEM<br>ICV/I.BLK<br>Surrogate Standard<br>MS/MSD Standard<br>LCS Standard | PP24468,PP24473                         |

| Sr# | SampleID        | ClientID | Data File Name | Date-Time         | Comment          | Operator | Status   |
|-----|-----------------|----------|----------------|-------------------|------------------|----------|----------|
| 1   | MECL2           |          | FG015816.D     | 13 May 2025 10:42 |                  | YPIAJ    | Ok       |
| 2   | I.BLK           |          | FG015817.D     | 13 May 2025 11:11 |                  | YPIAJ    | Ok       |
| 3   | 50 PPM TRPH STD |          | FG015818.D     | 13 May 2025 11:40 |                  | YPIAJ    | Ok       |
| 4   | RT MARKER       |          | FG015819.D     | 13 May 2025 12:13 |                  | YPIAJ    | Ok       |
| 5   | PB167975BL      |          | FG015820.D     | 13 May 2025 13:22 |                  | YPIAJ    | Ok       |
| 6   | PB167975BS      |          | FG015821.D     | 13 May 2025 13:51 |                  | YPIAJ    | Ok       |
| 7   | Q1872-14        |          | FG015822.D     | 13 May 2025 14:38 | need 5x dilution | YPIAJ    | Dilution |
| 8   | Q1872-14        |          | FG015823.D     | 13 May 2025 15:25 |                  | YPIAJ    | Ok,M     |
| 9   | I.BLK           |          | FG015824.D     | 13 May 2025 15:54 |                  | YPIAJ    | Ok       |
| 10  | 50 PPM TRPH STD |          | FG015825.D     | 13 May 2025 16:53 |                  | YPIAJ    | Ok       |
| 11  | Q1956-01        |          | FG015826.D     | 13 May 2025 17:22 |                  | YPIAJ    | Ok       |
| 12  | Q1956-02        |          | FG015827.D     | 13 May 2025 17:51 |                  | YPIAJ    | Ok       |
| 13  | Q1956-03MS      |          | FG015828.D     | 13 May 2025 18:21 |                  | YPIAJ    | Ok       |
| 14  | Q1956-04MSD     |          | FG015829.D     | 13 May 2025 18:50 |                  | YPIAJ    | Ok       |
| 15  | Q1956-06        |          | FG015830.D     | 13 May 2025 19:19 |                  | YPIAJ    | Ok       |
| 16  | Q1982-01        |          | FG015831.D     | 13 May 2025 19:49 |                  | YPIAJ    | Ok       |
| 17  | Q1982-02        |          | FG015832.D     | 13 May 2025 20:18 |                  | YPIAJ    | Ok       |
| 18  | Q1982-03        |          | FG015833.D     | 13 May 2025 20:47 |                  | YPIAJ    | Ok       |

Instrument ID: FID\_G

**Daily Analysis Runlog For Sequence/QC Batch ID # FG051325**

|              |          |                   |                       |          |  |
|--------------|----------|-------------------|-----------------------|----------|--|
| Review By    | yogesh   | Review On         | 5/13/2025 11:25:05 AM |          |  |
| Supervise By | mohammad | Supervise On      | 5/15/2025 3:42:38 AM  |          |  |
| SubDirectory | FG051325 | HP Acquire Method | HP Processing Method  | FG042425 |  |

| STD. NAME  | STD REF.#                               |
|--|---|
| Tune/Reschk<br>Initial Calibration Stds                            | PP24467,PP24469,PP24470,PP24471,PP24472 |
| CCC<br>Internal Standard/PEM                                       | PP24469                                 |
| ICV/I.BLK<br>Surrogate Standard<br>MS/MSD Standard<br>LCS Standard | PP24468,PP24473                         |

| Run # | Sample Name     | File Name  | Time              | Integration | Status |
|-------|-----------------|------------|-------------------|-------------|--------|
| 19    | I.BLK           | FG015834.D | 13 May 2025 21:16 | YPIAJ       | Ok     |
| 20    | 50 PPM TRPH STD | FG015835.D | 13 May 2025 21:46 | YPIAJ       | Ok     |
| 21    | Q2010-01        | FG015836.D | 13 May 2025 22:44 | YPIAJ       | Ok     |
| 22    | Q2010-02        | FG015837.D | 13 May 2025 23:14 | YPIAJ       | Ok     |
| 23    | Q2010-03        | FG015838.D | 13 May 2025 23:43 | YPIAJ       | Ok     |
| 24    | Q2010-04        | FG015839.D | 14 May 2025 00:12 | YPIAJ       | Ok     |
| 25    | I.BLK           | FG015840.D | 14 May 2025 00:41 | YPIAJ       | Ok     |
| 26    | 50 PPM TRPH STD | FG015841.D | 14 May 2025 01:10 | YPIAJ       | Ok     |

M : Manual Integration

**PERCENT SOLID**

Supervisor: Iwona  
 Analyst: jignesh  
 Date: 4/25/2025

OVENTEMP IN Celsius(°C): 107  
 Time IN: 17:00  
 In Date: 04/24/2025  
 Weight Check 1.0g: 1.00  
 Weight Check 10g: 10.00  
 OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103  
 Time OUT: 08:25  
 Out Date: 04/25/2025  
 Weight Check 1.0g: 1.00  
 Weight Check 10g: 10.00  
 BalanceID: M SC-4  
 Thermometer ID: % SOLID- OVEN

QC:LB135545

| 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 |
|----------|-------------------------|--------|-----------------|---------------|--------------------------|----------------------------|---------|----------|
| Q1869-01 | MH-F                    | 1      | 1.14            | 10.43         | 11.57                    | 10.47                      | 89.5    |          |
| Q1869-02 | MH-F-EPH                | 2      | 1.18            | 9.96          | 11.14                    | 10.12                      | 89.8    |          |
| Q1869-03 | MH-F-VOC                | 3      | 1.16            | 10.28         | 11.44                    | 10.4                       | 89.9    |          |
| Q1871-01 | MH-A                    | 4      | 1.14            | 9.59          | 10.73                    | 9.86                       | 90.9    |          |
| Q1871-02 | MH-A-EPH                | 5      | 1.18            | 9.97          | 11.15                    | 10.25                      | 91.0    |          |
| Q1871-03 | MH-A-VOC                | 6      | 1.15            | 10.22         | 11.37                    | 10.47                      | 91.2    |          |
| Q1871-05 | MH-B                    | 7      | 1.18            | 10.31         | 11.49                    | 10.58                      | 91.2    |          |
| Q1871-06 | MH-B-EPH                | 8      | 1.16            | 9.63          | 10.79                    | 10.05                      | 92.3    |          |
| Q1871-07 | MH-B-VOC                | 9      | 1.18            | 10.35         | 11.53                    | 10.75                      | 92.5    |          |
| Q1872-01 | HW0425-PT-AN-SOIL       | 31     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   |          |
| Q1872-02 | HW0425-PT-CORR-SOIL     | 32     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   |          |
| Q1872-03 | HW0425-PT-CN-SOIL       | 33     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   |          |
| Q1872-04 | HW0425-PT-CN-SOIL       | 34     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   |          |
| Q1872-05 | HW0425-PT-FP-SOIL       | 35     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   |          |
| Q1872-06 | HW0425-PT-CR6-SOIL      | 36     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   |          |
| Q1872-07 | HW0425-PT-NUT-SOIL      | 37     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   |          |
| Q1872-08 | HW0425-PT-NUT-SOIL      | 38     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   |          |
| Q1872-09 | HW0425-PT-OGR-SOIL      | 39     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   |          |
| Q1872-10 | HW0425-PT-MET-SOIL      | 40     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   |          |
| Q1872-11 | HW0425-PT-BNA-SOIL      | 41     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   |          |
| Q1872-12 | HW0425-PT-TRIAZINE-SOIL | 42     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   |          |
| Q1872-13 | HW0425-PT-PAH-SOIL      | 43     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   |          |
| Q1872-14 | HW0425-PT-DIES-SOIL     | 44     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   |          |
| Q1872-15 | HW0425-PT-GAS-SOIL      | 45     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   |          |
| Q1872-16 | HW0425-PT-NJEPH-SOIL    | 46     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   |          |
| Q1872-17 | HW0425-PT-HERB-SOIL     | 47     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   |          |
| Q1872-18 | HW0425-PT-PCB-SOIL      | 48     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   |          |
| Q1872-19 | HW0425-PT-PCBO-SOIL     | 49     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   |          |

**PERCENT SOLID**

Supervisor: Iwona  
 Analyst: jignesh  
 Date: 4/25/2025

OVENTEMP IN Celsius(°C): 107  
 Time IN: 17:00  
 In Date: 04/24/2025  
 Weight Check 1.0g: 1.00  
 Weight Check 10g: 10.00  
 OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103  
 Time OUT: 08:25  
 Out Date: 04/25/2025  
 Weight Check 1.0g: 1.00  
 Weight Check 10g: 10.00  
 BalanceID: M SC-4  
 Thermometer ID: % SOLID- OVEN

QC:LB135545

| 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    |
|----------|---------------------|--------|-----------------|---------------|--------------------------|----------------------------|---------|-------------|
| Q1872-20 | HW0425-PT-PEST-SOIL | 50     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   |             |
| Q1872-21 | HW0425-PT-CHLR-SOIL | 51     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   |             |
| Q1872-22 | HW0425-PT-TXP-SOIL  | 52     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   |             |
| Q1872-23 | HW0425-PT-VOA-SOIL  | 53     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   |             |
| Q1872-25 | HW0425-PT-NO2-SOIL  | 54     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   |             |
| Q1873-01 | CAM-40619           | 10     | 1.14            | 10.70         | 11.84                    | 4.97                       | 35.8    |             |
| Q1873-02 | CAM-40620           | 11     | 1.15            | 10.42         | 11.57                    | 6.19                       | 48.4    |             |
| Q1873-03 | CAM-40619-20        | 12     | 1.18            | 10.21         | 11.39                    | 4.77                       | 35.2    |             |
| Q1874-01 | VNJ-236             | 13     | 1.19            | 10.45         | 11.64                    | 10.89                      | 92.8    |             |
| Q1874-03 | RT1491              | 14     | 1.19            | 11.16         | 12.35                    | 11.43                      | 91.8    |             |
| Q1874-05 | HT3727              | 15     | 1.16            | 10.63         | 11.79                    | 11.06                      | 93.1    |             |
| Q1875-01 | AUD-25-0053         | 16     | 1.14            | 10.75         | 11.89                    | 11.19                      | 93.5    |             |
| Q1875-03 | AUD-25-0054         | 17     | 1.14            | 10.02         | 11.16                    | 10.52                      | 93.6    |             |
| Q1875-04 | AUD-25-0024         | 18     | 1.14            | 10.03         | 11.17                    | 10.77                      | 96.0    |             |
| Q1876-01 | AUD-25-0058         | 19     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | wipe sample |
| Q1876-02 | AUD-25-0059         | 20     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | wipe sample |
| Q1876-03 | AUD-25-0060         | 21     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | wipe sample |
| Q1876-04 | AUD-25-0061         | 22     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | wipe sample |
| Q1876-05 | AUD-25-0062         | 23     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | wipe sample |
| Q1876-06 | AUD-25-0063         | 24     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | wipe sample |
| Q1876-07 | AUD-25-0064         | 25     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | wipe sample |
| Q1876-08 | AUD-25-0065         | 26     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | wipe sample |
| Q1876-09 | AUD-25-0066         | 27     | 1.00            | 1.00          | 2.00                     | 2.00                       | 100.0   | wipe sample |
| Q1877-01 | AU-6-042425         | 55     | 1.14            | 10.25         | 11.39                    | 10.72                      | 93.5    |             |
| Q1877-02 | AU-6-042425         | 28     | 1.14            | 10.21         | 11.35                    | 10.54                      | 92.1    |             |
| Q1878-01 | TR-4-042425         | 29     | 1.14            | 10.17         | 11.31                    | 11.2                       | 98.9    |             |
| Q1878-02 | TR-4-042425-E2      | 30     | 1.19            | 10.28         | 11.47                    | 10.92                      | 94.6    |             |

**PERCENT SOLID**

Supervisor: Iwona  
 Analyst: jignesh  
 Date: 4/25/2025

OVENTEMP IN Celsius(°C): 107  
 Time IN: 17:00  
 In Date: 04/24/2025  
 Weight Check 1.0g: 1.00  
 Weight Check 10g: 10.00  
 OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103  
 Time OUT: 08:25  
 Out Date: 04/25/2025  
 Weight Check 1.0g: 1.00  
 Weight Check 10g: 10.00  
 BalanceID: M SC-4  
 Thermometer ID: % SOLID- OVEN

QC:LB135545

| 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 |
|--------|-----------------|--------|-----------------|---------------|--------------------------|----------------------------|---------|----------|
|        |                 |        |                 |               |                          |                            |         |          |

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18

# WORKLIST(Hardcopy Internal Chain)

UB 135545

WorkList Name : %1-042425

WorkList ID : 189122

Department : Wet-Chemistry

Date : 04-24-2025 08:52:24

| Sample   | Customer Sample         | Matrix | Test           | Preservative | Customer | Raw Sample Storage Location | Collect Date | Method       |
|----------|-------------------------|--------|----------------|--------------|----------|-----------------------------|--------------|--------------|
| Q1869-01 | MH-F                    | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L41                         | 04/24/2025   | Chemtech -SO |
| Q1869-02 | MH-F-EPH                | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L41                         | 04/24/2025   | Chemtech -SO |
| Q1869-03 | MH-F-VOC                | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L41                         | 04/24/2025   | Chemtech -SO |
| Q1871-01 | MH-A                    | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L41                         | 04/24/2025   | Chemtech -SO |
| Q1871-02 | MH-A-EPH                | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L41                         | 04/24/2025   | Chemtech -SO |
| Q1871-03 | MH-A-VOC                | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L41                         | 04/24/2025   | Chemtech -SO |
| Q1871-05 | MH-B                    | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L41                         | 04/24/2025   | Chemtech -SO |
| Q1871-06 | MH-B-EPH                | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L41                         | 04/24/2025   | Chemtech -SO |
| Q1871-07 | MH-B-VOC                | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L41                         | 04/24/2025   | Chemtech -SO |
| Q1872-01 | HW0425-PT-AN-SOIL       | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L41                         | 04/24/2025   | Chemtech -SO |
| Q1872-02 | HW0425-PT-CORR-SOIL     | Solid  | Percent Solids | Cool 4 deg C | ALLI03   | QA Of                       | 04/21/2025   | Chemtech -SO |
| Q1872-03 | HW0425-PT-CN-SOIL       | Solid  | Percent Solids | Cool 4 deg C | ALLI03   | QA Of                       | 04/21/2025   | Chemtech -SO |
| Q1872-04 | HW0425-PT-CN-SOIL       | Solid  | Percent Solids | Cool 4 deg C | ALLI03   | QA Of                       | 04/21/2025   | Chemtech -SO |
| Q1872-05 | HW0425-PT-FP-SOIL       | Solid  | Percent Solids | Cool 4 deg C | ALLI03   | QA Of                       | 04/21/2025   | Chemtech -SO |
| Q1872-06 | HW0425-PT-CR6-SOIL      | Solid  | Percent Solids | Cool 4 deg C | ALLI03   | QA Of                       | 04/21/2025   | Chemtech -SO |
| Q1872-07 | HW0425-PT-NUT-SOIL      | Solid  | Percent Solids | Cool 4 deg C | ALLI03   | QA Of                       | 04/21/2025   | Chemtech -SO |
| Q1872-08 | HW0425-PT-NUT-SOIL      | Solid  | Percent Solids | Cool 4 deg C | ALLI03   | QA Of                       | 04/21/2025   | Chemtech -SO |
| Q1872-09 | HW0425-PT-OGR-SOIL      | Solid  | Percent Solids | Cool 4 deg C | ALLI03   | QA Of                       | 04/21/2025   | Chemtech -SO |
| Q1872-10 | HW0425-PT-MET-SOIL      | Solid  | Percent Solids | Cool 4 deg C | ALLI03   | QA Of                       | 04/21/2025   | Chemtech -SO |
| Q1872-11 | HW0425-PT-BNA-SOIL      | Solid  | Percent Solids | Cool 4 deg C | ALLI03   | QA Of                       | 04/21/2025   | Chemtech -SO |
| Q1872-12 | HW0425-PT-TRIAZINE-SOIL | Solid  | Percent Solids | Cool 4 deg C | ALLI03   | QA Of                       | 04/21/2025   | Chemtech -SO |

Date/Time 04/24/25 15:30  
 Raw Sample Received by: [Signature]  
 Raw Sample Relinquished by: [Signature]

Date/Time 04/24/25 17:25  
 Raw Sample Received by: [Signature]  
 Raw Sample Relinquished by: [Signature]

# WORKLIST(Hardcopy Internal Chain)

*WB 135545*

WorkList Name : %1-042425

WorkList ID : 189122

Department : Wet-Chemistry

Date : 04-24-2025 08:52:24

| Sample   | Customer Sample      | Matrix | Test           | Preservative | Customer | Raw Sample Storage Location | Collect Date | Method       |
|----------|----------------------|--------|----------------|--------------|----------|-----------------------------|--------------|--------------|
| Q1872-13 | HW0425-PT-PAH-SOIL   | Solid  | Percent Solids | Cool 4 deg C | ALLI03   | QA Of                       | 04/21/2025   | Chemtech -SO |
| Q1872-14 | HW0425-PT-DIES-SOIL  | Solid  | Percent Solids | Cool 4 deg C | ALLI03   | QA Of                       | 04/21/2025   | Chemtech -SO |
| Q1872-15 | HW0425-PT-GAS-SOIL   | Solid  | Percent Solids | Cool 4 deg C | ALLI03   | QA Of                       | 04/21/2025   | Chemtech -SO |
| Q1872-16 | HW0425-PT-NJEPH-SOIL | Solid  | Percent Solids | Cool 4 deg C | ALLI03   | QA Of                       | 04/21/2025   | Chemtech -SO |
| Q1872-17 | HW0425-PT-HERB-SOIL  | Solid  | Percent Solids | Cool 4 deg C | ALLI03   | QA Of                       | 04/21/2025   | Chemtech -SO |
| Q1872-18 | HW0425-PT-PCB-SOIL   | Solid  | Percent Solids | Cool 4 deg C | ALLI03   | QA Of                       | 04/21/2025   | Chemtech -SO |
| Q1872-19 | HW0425-PT-PCBO-SOIL  | Solid  | Percent Solids | Cool 4 deg C | ALLI03   | QA Of                       | 04/21/2025   | Chemtech -SO |
| Q1872-20 | HW0425-PT-PEST-SOIL  | Solid  | Percent Solids | Cool 4 deg C | ALLI03   | QA Of                       | 04/21/2025   | Chemtech -SO |
| Q1872-21 | HW0425-PT-CHLR-SOIL  | Solid  | Percent Solids | Cool 4 deg C | ALLI03   | QA Of                       | 04/21/2025   | Chemtech -SO |
| Q1872-22 | HW0425-PT-TXP-SOIL   | Solid  | Percent Solids | Cool 4 deg C | ALLI03   | QA Of                       | 04/21/2025   | Chemtech -SO |
| Q1872-23 | HW0425-PT-VOA-SOIL   | Solid  | Percent Solids | Cool 4 deg C | ALLI03   | QA Of                       | 04/21/2025   | Chemtech -SO |
| Q1872-25 | HW0425-PT-NO2-SOIL   | Solid  | Percent Solids | Cool 4 deg C | ALLI03   | QA Of                       | 04/21/2025   | Chemtech -SO |
| Q1873-01 | CAM-40619            | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L41                         | 04/24/2025   | Chemtech -SO |
| Q1873-02 | CAM-40620            | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L41                         | 04/24/2025   | Chemtech -SO |
| Q1873-03 | CAM-40619-20         | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L41                         | 04/24/2025   | Chemtech -SO |
| Q1874-01 | VNJ-236              | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L51                         | 04/24/2025   | Chemtech -SO |
| Q1874-03 | RT1491               | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L51                         | 04/24/2025   | Chemtech -SO |
| Q1874-05 | HT3727               | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L51                         | 04/24/2025   | Chemtech -SO |
| Q1875-01 | AUD-25-0053          | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L41                         | 04/24/2025   | Chemtech -SO |
| Q1875-03 | AUD-25-0054          | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L41                         | 04/24/2025   | Chemtech -SO |
| Q1875-04 | AUD-25-0024          | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L41                         | 04/24/2025   | Chemtech -SO |

Date/Time 04/24/25 15:30  
 Raw Sample Received by: [Signature]  
 Raw Sample Relinquished by: [Signature]

Date/Time 04/24/25 17:25  
 Raw Sample Received by: [Signature]  
 Raw Sample Relinquished by: [Signature]

# WORKLIST(Hardcopy Internal Chain)

MB 135545

WorkList Name : %1-042425

WorkList ID : 189122

Department : Wet-Chemistry

Date : 04-24-2025 08:52:24

| Sample   | Customer Sample | Matrix | Test           | Preservative | Customer | Raw Sample Storage Location | Collect Date | Method       |
|----------|-----------------|--------|----------------|--------------|----------|-----------------------------|--------------|--------------|
| Q1876-01 | AUD-25-0058     | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L31                         | 04/24/2025   | Chemtech -SO |
| Q1876-02 | AUD-25-0059     | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L31                         | 04/24/2025   | Chemtech -SO |
| Q1876-03 | AUD-25-0060     | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L31                         | 04/24/2025   | Chemtech -SO |
| Q1876-04 | AUD-25-0061     | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L31                         | 04/24/2025   | Chemtech -SO |
| Q1876-05 | AUD-25-0062     | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L31                         | 04/24/2025   | Chemtech -SO |
| Q1876-06 | AUD-25-0063     | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L31                         | 04/24/2025   | Chemtech -SO |
| Q1876-07 | AUD-25-0064     | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L31                         | 04/24/2025   | Chemtech -SO |
| Q1876-08 | AUD-25-0065     | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L31                         | 04/24/2025   | Chemtech -SO |
| Q1876-09 | AUD-25-0066     | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L31                         | 04/24/2025   | Chemtech -SO |
| Q1877-01 | AU-6-042425     | Solid  | Percent Solids | Cool 4 deg C | PSEG05   | L41                         | 04/24/2025   | Chemtech -SO |
| Q1877-02 | AU-6-042425     | Solid  | Percent Solids | Cool 4 deg C | PSEG05   | L41                         | 04/24/2025   | Chemtech -SO |
| Q1878-01 | TR-4-042425     | Solid  | Percent Solids | Cool 4 deg C | PSEG05   | L41                         | 04/24/2025   | Chemtech -SO |
| Q1878-02 | TR-4-042425-E2  | Solid  | Percent Solids | Cool 4 deg C | PSEG05   | L41                         | 04/24/2025   | Chemtech -SO |

Date/Time 04/24/25 15:30  
 Raw Sample Received by: [Signature]  
 Raw Sample Relinquished by: [Signature]

Date/Time 04/24/23 17:25  
 Raw Sample Received by: [Signature]  
 Raw Sample Relinquished by: [Signature]

**PERCENT SOLID**

Supervisor: Iwona  
 Analyst: jignesh  
 Date: 4/29/2025

OVENTEMP IN Celsius(°C): 107  
 Time IN: 17:25  
 In Date: 04/28/2025  
 Weight Check 1.0g: 1.00  
 Weight Check 10g: 10.00  
 OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103  
 Time OUT: 08:37  
 Out Date: 04/29/2025  
 Weight Check 1.0g: 1.00  
 Weight Check 10g: 10.00  
 BalanceID: M SC-4  
 Thermometer ID: % SOLID- OVEN

QC:LB135575

| 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 |
|----------|--------------------|--------|-----------------|---------------|--------------------------|----------------------------|---------|----------|
| Q1872-24 | HW0425-PT-SOL-SOIL | 8      | 0.92            | 10.30         | 11.22                    | 8.82                       | 76.7    |          |
| Q1901-01 | B-170-SB00         | 1      | 1.14            | 5.55          | 6.69                     | 6.28                       | 92.6    |          |
| Q1901-02 | B-167-SB01         | 2      | 1.14            | 10.22         | 11.36                    | 9.58                       | 82.6    |          |
| Q1901-03 | B-170-SB01         | 3      | 1.19            | 10.31         | 11.5                     | 9.75                       | 83.0    |          |
| Q1901-04 | B-167-SB02         | 4      | 1.15            | 9.78          | 10.93                    | 6.35                       | 53.2    |          |
| Q1901-05 | B-170-SB02         | 5      | 1.14            | 10.16         | 11.3                     | 8.77                       | 75.1    |          |
| Q1902-01 | 343                | 6      | 1.19            | 10.23         | 11.42                    | 10.7                       | 93.0    |          |
| Q1902-02 | 343                | 7      | 1.13            | 10.19         | 11.32                    | 10.33                      | 90.3    |          |
| Q1903-01 | COMP-4             | 9      | 1.18            | 11.14         | 12.32                    | 10.46                      | 83.3    |          |
| Q1903-02 | COMP-5             | 10     | 1.16            | 10.50         | 11.66                    | 9.44                       | 78.9    |          |
| Q1903-03 | COMP-6             | 11     | 1.17            | 10.60         | 11.77                    | 10.06                      | 83.9    |          |
| Q1904-01 | VNJ-210            | 12     | 1.19            | 10.39         | 11.58                    | 10.6                       | 90.6    |          |
| Q1905-01 | MH-G               | 13     | 1.15            | 10.35         | 11.5                     | 10.38                      | 89.2    |          |
| Q1905-02 | MH-G-EPH           | 14     | 1.16            | 9.65          | 10.81                    | 9.71                       | 88.6    |          |
| Q1905-03 | MH-G-VOC           | 15     | 1.16            | 10.33         | 11.49                    | 10.36                      | 89.1    |          |
| Q1905-05 | MH-H               | 16     | 1.12            | 10.03         | 11.15                    | 10.5                       | 93.5    |          |
| Q1905-06 | MH-H-EPH           | 17     | 1.13            | 10.30         | 11.43                    | 10.5                       | 91.0    |          |
| Q1905-07 | MH-H-VOC           | 18     | 1.12            | 10.03         | 11.15                    | 10.01                      | 88.6    |          |
| Q1906-01 | WC-4               | 19     | 1.15            | 9.85          | 11.00                    | 10.14                      | 91.3    |          |
| Q1906-02 | WC-4-EPH           | 20     | 1.16            | 9.97          | 11.13                    | 10.17                      | 90.4    |          |
| Q1906-03 | WC-4-VOC           | 21     | 1.18            | 9.99          | 11.17                    | 9.91                       | 87.4    |          |
| Q1906-05 | WC-5               | 22     | 1.16            | 10.82         | 11.98                    | 10.19                      | 83.5    |          |
| Q1906-06 | WC-5-EPH           | 23     | 1.13            | 10.41         | 11.54                    | 9.94                       | 84.6    |          |
| Q1906-07 | WC-5-VOC           | 24     | 1.18            | 10.47         | 11.65                    | 11.63                      | 99.8    |          |
| Q1906-09 | WC-6               | 25     | 1.14            | 10.04         | 11.18                    | 10.4                       | 92.2    |          |
| Q1906-10 | WC-6-EPH           | 26     | 1.15            | 10.77         | 11.92                    | 10.23                      | 84.3    |          |
| Q1906-11 | WC-6-VOC           | 27     | 1.14            | 10.47         | 11.61                    | 10.86                      | 92.8    |          |
| Q1906-13 | WC-7               | 28     | 1.14            | 10.85         | 11.99                    | 10.31                      | 84.5    |          |



**PERCENT SOLID**

Supervisor: Iwona  
 Analyst: jignesh  
 Date: 4/29/2025

OVENTEMP IN Celsius(°C): 107  
 Time IN: 17:25  
 In Date: 04/28/2025  
 Weight Check 1.0g: 1.00  
 Weight Check 10g: 10.00  
 OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103  
 Time OUT: 08:37  
 Out Date: 04/29/2025  
 Weight Check 1.0g: 1.00  
 Weight Check 10g: 10.00  
 BalanceID: M SC-4  
 Thermometer ID: % SOLID- OVEN

QC:LB135575

| 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 |
|----------|-----------------|--------|-----------------|---------------|--------------------------|----------------------------|---------|----------|
| Q1906-14 | WC-7-EPH        | 29     | 1.12            | 9.86          | 10.98                    | 9.7                        | 87.0    |          |
| Q1906-15 | WC-7-VOC        | 30     | 1.13            | 10.27         | 11.4                     | 10.23                      | 88.6    |          |
| Q1907-01 | CO-8R-WC        | 31     | 1.13            | 10.26         | 11.39                    | 9.81                       | 84.6    |          |

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

# WORKLIST(Hardcopy Internal Chain)

WB 1355F5

**WorkList Name :** %1-042825

**WorkList ID :** 189159

**Department :** Wet-Chemistry

**Date :** 04-28-2025 07:59:12

| Sample   | Customer Sample    | Matrix | Test           | Preservative | Customer | Raw Sample Storage Location | Collect Date | Method       |
|----------|--------------------|--------|----------------|--------------|----------|-----------------------------|--------------|--------------|
| Q1872-24 | HW0425-PT-SOL-SOIL | Solid  | Percent Solids | Cool 4 deg C | ALLI03   | QA Of                       | 04/21/2025   | Chemtech -SO |
| Q1903-01 | COMP-4             | Solid  | Percent Solids | Cool 4 deg C | POWE02   | L51                         | 04/25/2025   | Chemtech -SO |
| Q1903-02 | COMP-5             | Solid  | Percent Solids | Cool 4 deg C | POWE02   | L51                         | 04/25/2025   | Chemtech -SO |
| Q1903-03 | COMP-6             | Solid  | Percent Solids | Cool 4 deg C | POWE02   | L51                         | 04/25/2025   | Chemtech -SO |
| Q1901-01 | B-170-SB00         | Solid  | Percent Solids | Cool 4 deg C | PORT06   | L51                         | 04/26/2025   | Chemtech -SO |
| Q1901-02 | B-167-SB01         | Solid  | Percent Solids | Cool 4 deg C | PORT06   | L51                         | 04/26/2025   | Chemtech -SO |
| Q1901-03 | B-170-SB01         | Solid  | Percent Solids | Cool 4 deg C | PORT06   | L51                         | 04/26/2025   | Chemtech -SO |
| Q1901-04 | B-167-SB02         | Solid  | Percent Solids | Cool 4 deg C | PORT06   | L51                         | 04/26/2025   | Chemtech -SO |
| Q1901-05 | B-170-SB02         | Solid  | Percent Solids | Cool 4 deg C | PORT06   | L51                         | 04/26/2025   | Chemtech -SO |
| Q1902-01 | 343                | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L41                         | 04/28/2025   | Chemtech -SO |
| Q1902-02 | 343                | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L41                         | 04/28/2025   | Chemtech -SO |
| Q1904-01 | VNJ-210            | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L41                         | 04/28/2025   | Chemtech -SO |
| Q1905-01 | MH-G               | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L51                         | 04/28/2025   | Chemtech -SO |
| Q1905-02 | MH-G-EPH           | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L51                         | 04/28/2025   | Chemtech -SO |
| Q1905-03 | MH-G-VOC           | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L51                         | 04/28/2025   | Chemtech -SO |
| Q1906-13 | WC-7               | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L41                         | 04/28/2025   | Chemtech -SO |
| Q1906-14 | WC-7-EPH           | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L41                         | 04/28/2025   | Chemtech -SO |
| Q1906-15 | WC-7-VOC           | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L41                         | 04/28/2025   | Chemtech -SO |
| Q1906-05 | WC-5               | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L41                         | 04/28/2025   | Chemtech -SO |
| Q1906-06 | WC-5-EPH           | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L41                         | 04/28/2025   | Chemtech -SO |
| Q1906-07 | WC-5-VOC           | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L41                         | 04/28/2025   | Chemtech -SO |

**Date/Time** 04/28/25 16:15  
**Raw Sample Received by:** JD WOC  
**Raw Sample Relinquished by:** OP

**Date/Time** 04/28/25 17:30  
**Raw Sample Received by:** OP  
**Raw Sample Relinquished by:** JD WOC

# WORKLIST(Hardcopy Internal Chain)

WB 135575

WorkList Name : %1-042825

WorkList ID : 189159

Department : Wet-Chemistry

Date : 04-28-2025 07:59:12

| Sample   | Customer Sample | Matrix | Test           | Preservative | Customer | Raw Sample Storage Location | Collect Date | Method       |
|----------|-----------------|--------|----------------|--------------|----------|-----------------------------|--------------|--------------|
| Q1906-09 | WC-6            | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L41                         | 04/28/2025   | Chemtech -SO |
| Q1906-10 | WC-6-EPH        | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L41                         | 04/28/2025   | Chemtech -SO |
| Q1906-11 | WC-6-VOC        | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L41                         | 04/28/2025   | Chemtech -SO |
| Q1905-05 | MH-H            | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L51                         | 04/28/2025   | Chemtech -SO |
| Q1905-06 | MH-H-EPH        | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L51                         | 04/28/2025   | Chemtech -SO |
| Q1905-07 | MH-H-VOC        | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L51                         | 04/28/2025   | Chemtech -SO |
| Q1906-01 | WC-4            | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L41                         | 04/28/2025   | Chemtech -SO |
| Q1906-02 | WC-4-EPH        | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L41                         | 04/28/2025   | Chemtech -SO |
| Q1906-03 | WC-4-VOC        | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L41                         | 04/28/2025   | Chemtech -SO |
| Q1907-01 | CO-8R-WC        | Solid  | Percent Solids | Cool 4 deg C | WALS01   | L51                         | 04/28/2025   | Chemtech -SO |

Date/Time 04/28/25 16:15  
 Raw Sample Received by: JD WELC  
 Raw Sample Relinquished by: CP

Date/Time 04/28/25 17:30  
 Raw Sample Received by: CP  
 Raw Sample Relinquished by: JD WELC

**SOP ID:** M3541-ASE Extraction-14

**Clean Up SOP #:** N/A      **Extraction Start Date :** 05/13/2025

**Matrix :** Solid      **Extraction Start Time :** 10:05

**Weigh By:** EH      **Extraction By:** RJ      **Extraction End Date :** 05/13/2025

**Balance check:** RJ      **Filter By:** RJ      **Extraction End Time :** 13:10

**Balance ID:** EX-SC-2      **pH Meter ID:** N/A      **Concentration By:** EH

**pH Strip Lot#:** N/A      **Hood ID:** 3,7      **Supervisor By :** RUPESH

**Extraction Method:**     Separatory Funnel     Continuous Liquid/Liquid     Sonication     Waste Dilution     Soxhlet

| Standard Name | MLS USED | Concentration ug/mL | STD REF. # FROM LOG |
|---------------|----------|---------------------|---------------------|
| Spike Sol 1   | 1.0ML    | 20 PPM              | PP24162             |
| Surrogate     | 1.0ML    | 20 PPM              | PP24180             |
| N/A           | N/A      | N/A                 | N/A                 |
| N/A           | N/A      | N/A                 | N/A                 |
| N/A           | N/A      | N/A                 | N/A                 |

| Chemical Used      | ML/SAMPLE USED | Lot Number |
|--------------------|----------------|------------|
| MeCl2/Acetone/1:1  | N/A            | EP2612     |
| Baked Na2SO4       | N/A            | EP2611     |
| Sand               | N/A            | E2865      |
| Methylene Chloride | N/A            | E3930      |
| 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

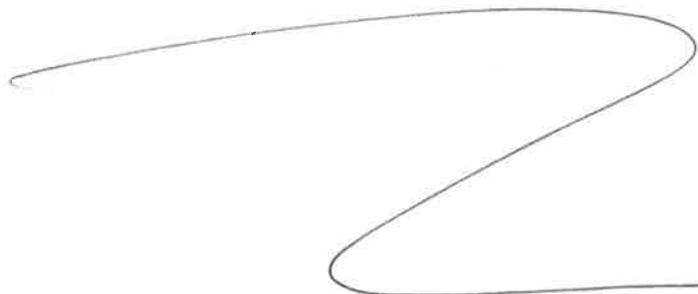
**KD Bath Temperature:** N/A      **Envap Temperature:** 40 °C

| Date / Time | Prepped Sample Relinquished By/Location | Received By/Location |
|-------------|---|----------------------|
| 5/13/25     | RS (Ext Lab)                            | Y.P. Pestipco        |
| 13:15       | Preparation Group                       | Analysis Group       |

Analytical Method: M3541-ASE Extraction-14

Concentration Date: 05/13/2025

| Sample ID  | Client Sample ID    | Test                  | g/ mL | PH  | Surr/Spike By: |            | Final Vol. (mL) | JarID | Comments | Prep Pos |
|------------|---------------------|-----------------------|-------|-----|----------------|------------|-----------------|-------|----------|----------|
|            |                     |                       |       |     | AddedBy        | VerifiedBy |                 |       |          |          |
| PB167975BL | PB167975BL          | Diesel Range Organics | 30.01 | N/A | ritesh         | Evelyn     | 1               |       |          | U1-1     |
| PB167975BS | PB167975BS          | Diesel Range Organics | 30.02 | N/A | ritesh         | Evelyn     | 1               |       |          | 2        |
| Q1872-14   | HW0425-PT-DIES-SOIL | Diesel Range Organics | 20.24 | N/A | ritesh         | Evelyn     | 1               |       |          | 3        |
| Q1956-01   | SB1-3-4             | Diesel Range Organics | 30.06 | N/A | ritesh         | Evelyn     | 1               | M     |          | 4        |
| Q1956-02   | SB2-4-5             | Diesel Range Organics | 30.05 | N/A | ritesh         | Evelyn     | 1               | M     |          | 5        |
| Q1956-03   | Q1956-02MS          | Diesel Range Organics | 30.03 | N/A | ritesh         | Evelyn     | 1               | M     |          | 6        |
| Q1956-04   | Q1956-02MSD         | Diesel Range Organics | 30.04 | N/A | ritesh         | Evelyn     | 1               | M     |          | U2-1     |
| Q1956-06   | SB91-3-4            | Diesel Range Organics | 30.01 | N/A | ritesh         | Evelyn     | 1               | M     |          | 2        |
| Q1982-01   | TP-1                | Diesel Range Organics | 30.07 | N/A | ritesh         | Evelyn     | 1               | E     |          | 3        |
| Q1982-02   | TP-2B               | Diesel Range Organics | 30.03 | N/A | ritesh         | Evelyn     | 1               | E     |          | 4        |
| Q1982-03   | TP-3                | Diesel Range Organics | 30.02 | N/A | ritesh         | Evelyn     | 1               | E     |          | 5        |
| Q1982-04   | TP-4                | Diesel Range Organics | 30.01 | N/A | ritesh         | Evelyn     | 1               | E     |          | 6        |
| Q1982-05   | TP-5                | Diesel Range Organics | 30.04 | N/A | ritesh         | Evelyn     | 1               | E     |          | U3-1     |
| Q1982-06   | TP-6                | Diesel Range Organics | 30.06 | N/A | ritesh         | Evelyn     | 1               | E     |          | 2        |
| Q1982-07   | TP-8                | Diesel Range Organics | 30.02 | N/A | ritesh         | Evelyn     | 1               | E     |          | 3        |
| Q1982-08   | TP-9                | Diesel Range Organics | 30.03 | N/A | ritesh         | Evelyn     | 1               | E     |          | 4        |
| Q2010-01   | TP-10               | Diesel Range Organics | 30.07 | N/A | ritesh         | Evelyn     | 1               | E     |          | 5        |
| Q2010-02   | TP-13               | Diesel Range Organics | 30.04 | N/A | ritesh         | Evelyn     | 1               | E     |          | 6        |
| Q2010-03   | TP-14               | Diesel Range Organics | 30.06 | N/A | ritesh         | Evelyn     | 1               | E     |          | U6-1     |
| Q2010-04   | TP-17               | Diesel Range Organics | 30.08 | N/A | ritesh         | Evelyn     | 1               | E     |          | 2        |



RS  
5/13

\* Extracts relinquished on the same date as received.

167975  
10:05

### WORKLIST(Hardcopy Internal Chain)

WorkList Name : Q1982D

WorkList ID : 189483

Department : Extraction

Date : 05-13-2025 08:56:47

| Sample   | Customer Sample     | Matrix | Test                  | Preservative | Customer | Raw Sample Storage Location | Collect Date | Method |
|----------|---------------------|--------|-----------------------|--------------|----------|-----------------------------|--------------|--------|
| Q1872-14 | HW0425-PT-DIES-SOIL | Solid  | Diesel Range Organics | Cool 4 deg C | ALLI03   | QA Of                       | 04/25/2025   | 8015D  |
| Q1956-01 | SB1-3-4             | Solid  | Diesel Range Organics | Cool 4 deg C | CAMP02   | L31                         | 05/01/2025   | 8015D  |
| Q1956-02 | SB2-4-5             | Solid  | Diesel Range Organics | Cool 4 deg C | CAMP02   | L31                         | 05/02/2025   | 8015D  |
| Q1956-03 | Q1956-02MS          | Solid  | Diesel Range Organics | Cool 4 deg C | CAMP02   | L31                         | 05/02/2025   | 8015D  |
| Q1956-04 | Q1956-02MSD         | Solid  | Diesel Range Organics | Cool 4 deg C | CAMP02   | L31                         | 05/02/2025   | 8015D  |
| Q1956-06 | SB91-3-4            | Solid  | Diesel Range Organics | Cool 4 deg C | CAMP02   | L31                         | 05/01/2025   | 8015D  |
| Q1982-01 | TP-1                | Solid  | Diesel Range Organics | Cool 4 deg C | CAMP02   | L41                         | 05/07/2025   | 8015D  |
| Q1982-02 | TP-2B               | Solid  | Diesel Range Organics | Cool 4 deg C | CAMP02   | L41                         | 05/07/2025   | 8015D  |
| Q1982-03 | TP-3                | Solid  | Diesel Range Organics | Cool 4 deg C | CAMP02   | L41                         | 05/07/2025   | 8015D  |
| Q1982-04 | TP-4                | Solid  | Diesel Range Organics | Cool 4 deg C | CAMP02   | L41                         | 05/07/2025   | 8015D  |
| Q1982-05 | TP-5                | Solid  | Diesel Range Organics | Cool 4 deg C | CAMP02   | L41                         | 05/07/2025   | 8015D  |
| Q1982-06 | TP-6                | Solid  | Diesel Range Organics | Cool 4 deg C | CAMP02   | L41                         | 05/07/2025   | 8015D  |
| Q1982-07 | TP- <del>8</del>    | Solid  | Diesel Range Organics | Cool 4 deg C | CAMP02   | L41                         | 05/07/2025   | 8015D  |
| Q1982-08 | TP- <del>9</del>    | Solid  | Diesel Range Organics | Cool 4 deg C | CAMP02   | L41                         | 05/07/2025   | 8015D  |
| Q2010-01 | TP-10               | Solid  | Diesel Range Organics | Cool 4 deg C | CAMP02   | L51                         | 05/08/2025   | 8015D  |
| Q2010-02 | TP-13               | Solid  | Diesel Range Organics | Cool 4 deg C | CAMP02   | L51                         | 05/08/2025   | 8015D  |
| Q2010-03 | TP-14               | Solid  | Diesel Range Organics | Cool 4 deg C | CAMP02   | L51                         | 05/08/2025   | 8015D  |
| Q2010-04 | TP-17               | Solid  | Diesel Range Organics | Cool 4 deg C | CAMP02   | L51                         | 05/08/2025   | 8015D  |

RS  
5/16

Date/Time 05/13/25 10:00

Raw Sample Received by: RS (EAT-100)

Raw Sample Relinquished by: CP SM

Date/Time 05/13/25 10:30

Raw Sample Received by: CP SM

Raw Sample Relinquished by: RS (EAT-100)

### Prep Standard - Chemical Standard Summary

**Order ID :** Q1872  
**Test :** Diesel Range Organics  
**Prepbatch ID :** PB167975,  
**Sequence ID/Qc Batch ID:** FG051325,

**Standard ID :**  
EP2611,EP2612,PP24162,PP24180,PP24467,PP24468,PP24469,PP24470,PP24471,PP24472,PP24473,

**Chemical ID :**  
E2865,E3551,E3874,E3926,E3930,E3932,P11951,P11952,P11955,P11956,P13106,P13108,P13477,P13479,P13487,P13488,P13489,P13490,

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### 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>                |
|------------------|----------------------|------------------------|------------------|------------------------|--------------------|---------------------------------|------------------|-------------------------------------|
| 3923             | Baked Sodium Sulfate | <a href="#">EP2611</a> | 05/09/2025       | 07/01/2025             | RUPESHKUMAR SHAH   | Extraction_SCALE_2<br>(EX-SC-2) | None             | Riteshkumar Patel<br><br>05/09/2025 |

**FROM** 4000.00000gram of E3551 = Final Quantity: 4000.000 gram

| <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="#">EP2612</a> | 05/09/2025       | 11/05/2025             | RUPESHKUMAR SHAH   | None           | None             | Riteshkumar Patel<br><br>05/09/2025 |

**FROM** 8000.00000ml of E3930 + 8000.00000ml of E3932 = Final Quantity: 16000.000 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>         |
|------------------|------------------------------------|-------------------------|------------------|------------------------|--------------------|----------------|------------------|------------------------------|
| 3609             | 20 PPM DRO SPIKE SOLUTION (RESTEK) | <a href="#">PP24162</a> | 01/31/2025       | 07/30/2025             | Yogesh Patel       | None           | None             | Ankita Jodhani<br>01/31/2025 |

**FROM** 1.00000ml of P11955 + 1.00000ml of P11956 + 48.00000ml of E3874 = 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="#">PP24180</a> | 02/03/2025       | 07/30/2025             | Yogesh Patel       | None           | None             | Ankita Jodhani<br>02/03/2025 |

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

### 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="#">PP24467</a> | 04/22/2025       | 10/08/2025             | Yogesh Patel       | None           | None             | Abdul Mirza<br>05/08/2025 |

**FROM** 1.00000ml of P11951 + 1.00000ml of P11952 + 1.00000ml of P13477 + 7.00000ml of E3926 = 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>      |
|------------------|------------------------------|-------------------------|------------------|------------------------|--------------------|----------------|------------------|---------------------------|
| 3979             | 100/100 PPM DRO ICV (RESTEK) | <a href="#">PP24468</a> | 04/22/2025       | 10/08/2025             | Yogesh Patel       | None           | None             | Abdul Mirza<br>05/08/2025 |

**FROM** 1.00000ml of P13106 + 1.00000ml of P13108 + 1.00000ml of P13479 + 7.00000ml of E3926 = 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="#">PP24469</a> | 04/22/2025       | 10/08/2025             | Yogesh Patel       | None           | None             | Abdul Mirza<br>05/08/2025 |

**FROM** 0.50000ml of E3926 + 0.50000ml of PP24467 = 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="#">PP24470</a> | 04/22/2025       | 10/08/2025             | Yogesh Patel       | None           | None             | Abdul Mirza<br>05/08/2025 |

**FROM** 0.80000ml of E3926 + 0.20000ml of PP24467 = 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="#">PP24471</a> | 04/22/2025       | 10/08/2025             | Yogesh Patel       | None           | None             | Abdul Mirza<br>05/08/2025 |

**FROM** 0.90000ml of E3926 + 0.10000ml of PP24467 = 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="#">PP24472</a> | 04/22/2025       | 10/08/2025             | Yogesh Patel       | None           | None             | Abdul Mirza<br>05/08/2025 |

**FROM** 0.90000ml of E3926 + 0.10000ml of PP24469 = 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>      |
|------------------|-----------------------------|-------------------------|------------------|------------------------|--------------------|----------------|------------------|---------------------------|
| 3608             | 50 PPM ICV DRO STD (RESTEK) | <a href="#">PP24473</a> | 04/22/2025       | 10/08/2025             | Yogesh Patel       | None           | None             | Abdul Mirza<br>05/08/2025 |

**FROM** 0.50000ml of E3926 + 0.50000ml of PP24468 = Final Quantity: 1.000 ml

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18

### CHEMICAL RECEIPT LOG BOOK

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

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

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

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

| Supplier         | ItemCode / ItemName   | Lot #      | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|------------------|---|------------|-----------------|-------------------------|-----------------------------|----------------|
| Seidler Chemical | BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L) | 25A0262002 | 02/20/2026      | 05/02/2025 / RUPESH     | 03/09/2025 / RUPESH         | E3930          |

| Supplier         | ItemCode / ItemName                        | Lot #      | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|------------------|--|------------|-----------------|-------------------------|-----------------------------|----------------|
| Seidler Chemical | BA-9254-03 / Acetone, Ultra Resi (cs/4x4L) | 24H1462005 | 11/05/2025      | 05/05/2025 / RUPESH     | 04/23/2025 / RUPESH         | E3932          |

### CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName           | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|-------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 31266 / Florida TRPH Standard | A0186840 | 10/22/2025      | 04/22/2025 / yogesh     | 07/11/2022 / Yogesh         | P11951         |

| Supplier | ItemCode / ItemName           | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|-------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 31266 / Florida TRPH Standard | A0186840 | 10/22/2025      | 04/22/2025 / yogesh     | 07/11/2022 / Yogesh         | P11952         |

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

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

| Supplier | ItemCode / ItemName           | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|-------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 31266 / Florida TRPH Standard | A0204859 | 10/22/2025      | 04/22/2025 / yogesh     | 01/12/2024 / Yogesh         | P13106         |

| Supplier | ItemCode / ItemName           | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|-------------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Restek   | 31266 / Florida TRPH Standard | A0204859 | 10/22/2025      | 04/22/2025 / yogesh     | 01/12/2024 / Yogesh         | P13108         |

### CHEMICAL RECEIPT LOG BOOK

| Supplier                 | ItemCode / ItemName                   | Lot #  | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|--------------------------|---------------------------------------|--------|-----------------|-------------------------|-----------------------------|----------------|
| Absolute Standards, Inc. | 72072 / n-Tetracosane-d50, 1000 ug/ml | 101122 | 10/22/2025      | 04/22/2025 / yogesh     | 07/24/2024 / yogesh         | P13477         |

| Supplier                 | ItemCode / ItemName                   | Lot #  | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|--------------------------|---------------------------------------|--------|-----------------|-------------------------|-----------------------------|----------------|
| Absolute Standards, Inc. | 72072 / n-Tetracosane-d50, 1000 ug/ml | 101122 | 10/22/2025      | 04/22/2025 / yogesh     | 07/24/2024 / yogesh         | P13479         |

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

| Supplier                 | ItemCode / ItemName                   | Lot #  | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|--------------------------|---------------------------------------|--------|-----------------|-------------------------|-----------------------------|----------------|
| Absolute Standards, Inc. | 72072 / n-Tetracosane-d50, 1000 ug/ml | 101122 | 08/03/2025      | 02/03/2025 / yogesh     | 07/24/2024 / yogesh         | P13488         |

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

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

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 foreign 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 7/24/23 E 3551

RC-02-01, Ed. 1

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) Single Impurity Peak (ng/mL)                             | <= 5          | 1       |
| ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)                              | <= 10         | 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 |
| Titration Acid (µeq/g)   | <= 0.3        | <0.1    |
| Chloride (Cl)  | <= 10 ppm     | <5 ppm  |
| Water (by KF, coulometric)   | <= 0.02 %     | <0.01 % |

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

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

E 3874

  
 Jamie Croak  
 Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials, LLC

100 Matsonford Rd, Suite 200, Radnor, PA, 19087, U.S.A. Phone 610.386.1700

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) Single Impurity Peak (ng/mL)                             | <= 5          | 1       |
| ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)                              | <= 10         | 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 |
| Titration Acid (µeq/g)   | <= 0.3        | <0.1    |
| Chloride (Cl)  | <= 10 ppm     | <5 ppm  |
| Water (by KF, coulometric)   | <= 0.02 %     | <0.01 % |

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

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

E 3926

  
 Jamie Croak  
 Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials, LLC

100 Matsonford Rd, Suite 200, Radnor, PA, 19087, U.S.A. Phone 610.386.1700

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) Single Impurity Peak (ng/mL)                             | <= 5          | 1       |
| ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)                              | <= 10         | 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 |
| Titration 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

E3930

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

Acetone  
BAKER RESI-ANALYZED® Reagent  
For Organic Residue Analysis

Avantor™



Material No.: 9254-03  
Batch No.: 24H1462005  
Manufactured Date: 2024-05-24  
Expiration Date: 2027-05-24  
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 %     | 99.8 %      |
| Color (APHA)  | <= 10         | 5           |
| Residue after Evaporation   | <= 1.0 ppm    | 0.2 ppm     |
| Substances Reducing Permanganate  | Passes Test   | Passes Test |
| Titration Acid (µeq/g)  | <= 0.3        | 0.2         |
| Titration Base (µeq/g)  | <= 0.6        | <0.1        |
| Water (H <sub>2</sub> O)  | <= 0.5 %      | 0.2 %       |
| FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)    | <= 5          | <1          |
| ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)    | <= 10         | 1           |

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

RS

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

E 3932

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



# CERTIFIED REFERENCE MATERIAL

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

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.*

P11948  
L  
P11962 } 7.0  
07/1

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

**Description :** Florida TRPH Standard  
Florida TRPH Standard 500µg/mL, Hexane, 1mL/ampul

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

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

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

### CERTIFIED VALUES

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

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

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

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

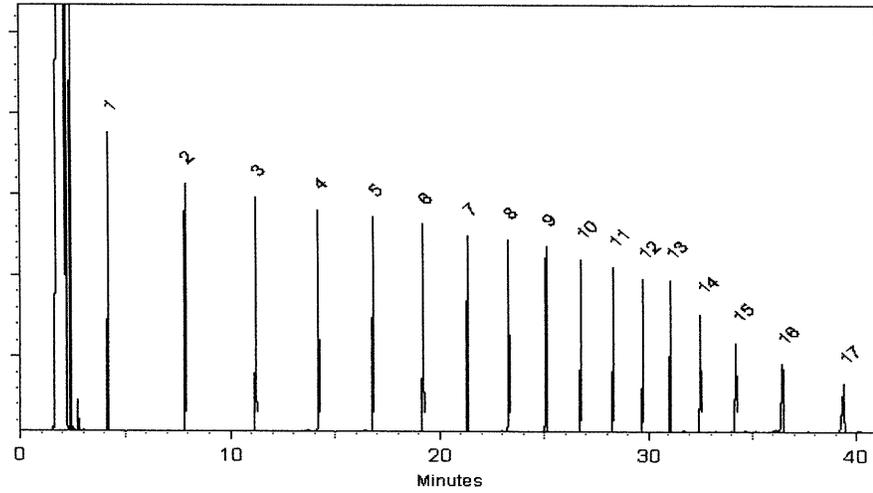
**Carrier Gas:**  
hydrogen-constant pressure 10 psi.

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

**Inj. Temp:**  
250°C

**Det. Temp:**  
330°C

**Det. Type:**  
FID



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

*Brittany Federinko*

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:

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

$k$  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)<br>-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

## 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.*

P11948  
L  
P11962 } 7.0  
07/11

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

**Description :** Florida TRPH Standard  
Florida TRPH Standard 500µg/mL, Hexane, 1mL/ampul

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

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

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

### CERTIFIED VALUES

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

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

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

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

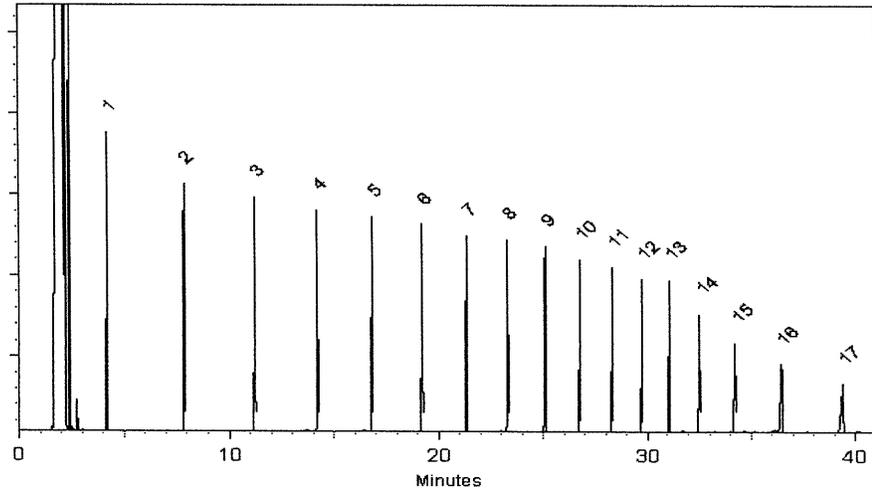
**Carrier Gas:**  
hydrogen-constant pressure 10 psi.

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

**Inj. Temp:**  
250°C

**Det. Temp:**  
330°C

**Det. Type:**  
FID



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

*Brittany Federinko*

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:

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

$k$  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)<br>-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

## 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.*

P11948  
L  
P11962 } 7.0  
07/11

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

**Description :** Florida TRPH Standard  
Florida TRPH Standard 500µg/mL, Hexane, 1mL/ampul

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

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

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

### CERTIFIED VALUES

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

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

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

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

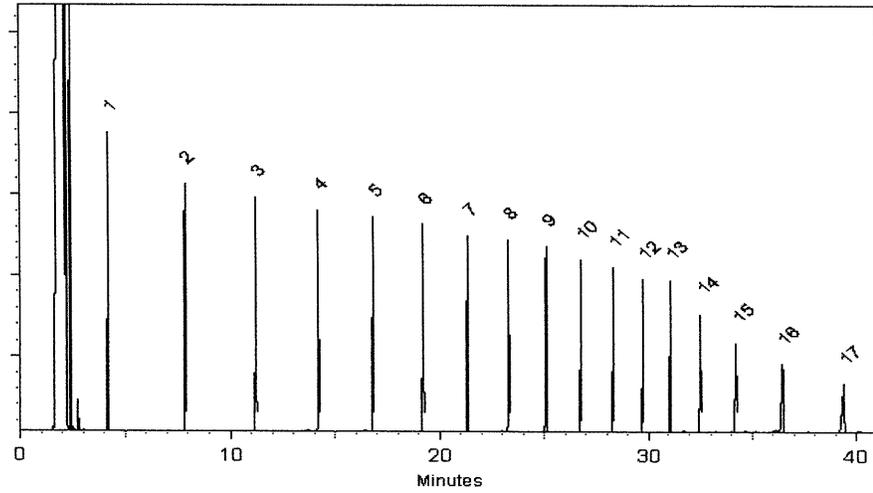
**Carrier Gas:**  
hydrogen-constant pressure 10 psi.

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

**Inj. Temp:**  
250°C

**Det. Temp:**  
330°C

**Det. Type:**  
FID



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

*Brittany Federinko*

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:

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

$k$  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)<br>-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

## 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.*

P11948  
L  
P11962 } 7.0  
07/11

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

**Description :** Florida TRPH Standard  
Florida TRPH Standard 500µg/mL, Hexane, 1mL/ampul

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

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

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

### CERTIFIED VALUES

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

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

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

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

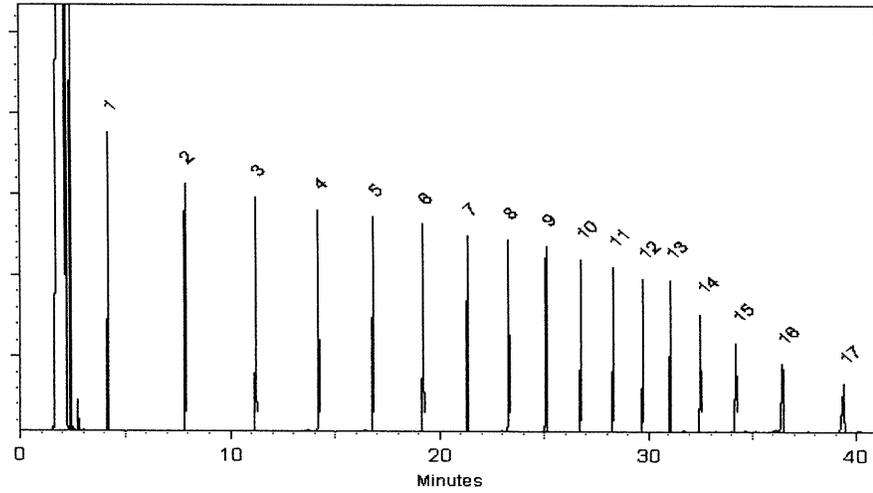
**Carrier Gas:**  
hydrogen-constant pressure 10 psi.

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

**Inj. Temp:**  
250°C

**Det. Temp:**  
330°C

**Det. Type:**  
FID



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

*Brittany Federinko*

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:

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

$k$  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)<br>-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.



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

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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  
**Description :** Florida TRPH Standard  
Florida TRPH Standard 500µg/mL, Hexane, 1mL/ampul  
**Container Size :** 2 mL **Pkg Amt:** > 1 mL  
**Expiration Date :** December 31, 2030 **Storage:** 25°C nominal  
**Handling:** Sonicate prior to use. **Ship:** Ambient

P13103 } Y.P.  
 ↓  
 P13112 } 01/12/2024

CERTIFIED VALUES

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

**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.)

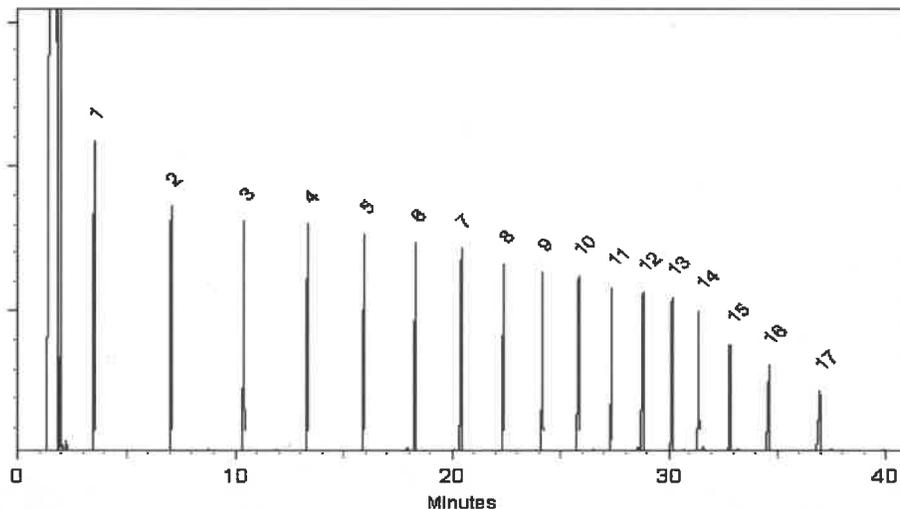
**Inj. Temp:**  
250°C

**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.

*[Signature]*  
Dakota Parson - Operations Technician I

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

*[Signature]*  
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.



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  
**Description :** Florida TRPH Standard  
Florida TRPH Standard 500µg/mL, Hexane, 1mL/ampul  
**Container Size :** 2 mL **Pkg Amt:** > 1 mL  
**Expiration Date :** December 31, 2030 **Storage:** 25°C nominal  
**Handling:** Sonicate prior to use. **Ship:** Ambient

P13103 } Y.P.  
 ↓ }  
 P13112 } 01/12/2024

CERTIFIED VALUES

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

**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.)

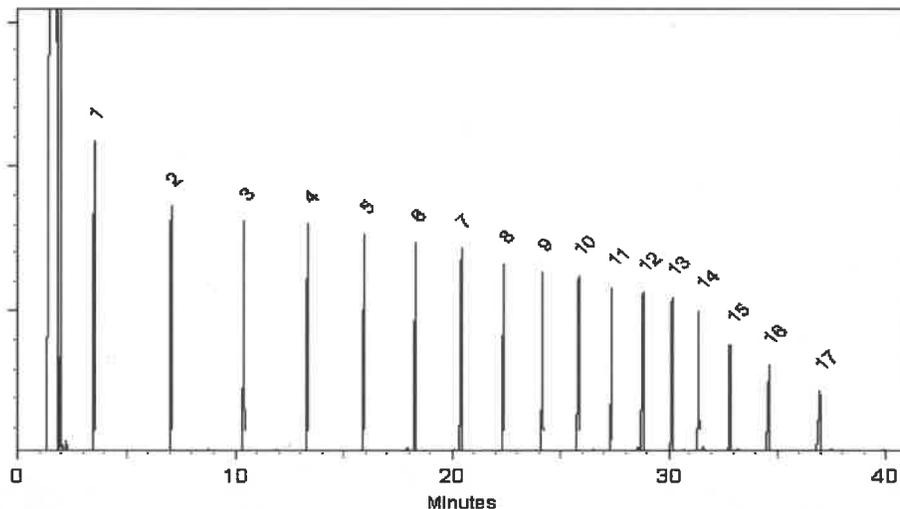
**Inj. Temp:**  
250°C

**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.

*[Signature]*  
Dakota Parson - Operations Technician I

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

*[Signature]*  
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:

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

$k$  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.

# 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  
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 Scope: http://AbsoluteStandards.com

**CERTIFIED WEIGHT REPORT**

Part # 10009R Solvent(s) Methylene chloride Lot# 78702  
 Lot # 070718  
 Shelf Life Description: CLP Priority Pollutant Internal Standards  
 GC/MS Calibration - 6 components  
 Expiration Date: 070721  
 Recommended Storage: Ambient (20 °C)  
 Nominal Concentration (µg/mL): 4000  
 NIST Test ID#: 822-275872-11

Weight(s) shown below were combined and diluted to (mL): 500.0 0.058 Balance Uncertainty: 0.005 Mass Uncertainty: 0.0005

| Compound                  | RM# | Lot Number        | Nominal Conc (µg/mL) | Purity (%) | Uncertainty (%) | Target Weight(µg) | Actual Weight(µg) | Actual Conc (µg/mL) | Expanded Uncertainty (±) (µg/mL) | CAS#       | OSHA PEL (TWA)      | LD50            |
|---------------------------|-----|-------------------|----------------------|------------|-----------------|-------------------|-------------------|---------------------|----------------------------------|------------|---------------------|-----------------|
| 1. 1,4-Dichlorobenzene-d4 | 118 | PR-1845807287CB1  | 4000                 | 99         | 0.2             | 2.04093           | 2.04335           | 4004.7              | 16.4                             | 2855-02-1  | N/A                 | or-rat 500mg/kg |
| 2. Naphthalene-d8         | 223 | PR-23329031612HP1 | 4000                 | 99         | 0.2             | 2.02032           | 2.02084           | 4001.0              | 16.2                             | 1168-85-2  | 10 ppm (50mg/m3/8H) | or-rat 400mg/kg |
| 3. Acenaphthene-d10       | 2   | PR-25444          | 4000                 | 99         | 0.2             | 2.02032           | 2.02245           | 4004.2              | 16.2                             | 15067-26-2 | N/A                 | ip-rat 500mg/kg |
| 4. Phenanthrene-d10       | 248 | PR-23065081711PM1 | 4000                 | 98         | 0.2             | 2.04093           | 2.04135           | 4000.8              | 16.4                             | 1517-25-2  | N/A                 | N/A             |
| 5. Chrysene-d12           | 92  | I-19250           | 4000                 | 98         | 0.2             | 2.04093           | 2.04158           | 4001.3              | 16.4                             | 1719-03-5  | N/A                 | N/A             |
| 6. Perylene-d12           | 247 | PR-24112          | 4000                 | 98         | 0.2             | 2.04093           | 2.04158           | 4001.2              | 16.4                             | 1503-06-3  | N/A                 | N/A             |

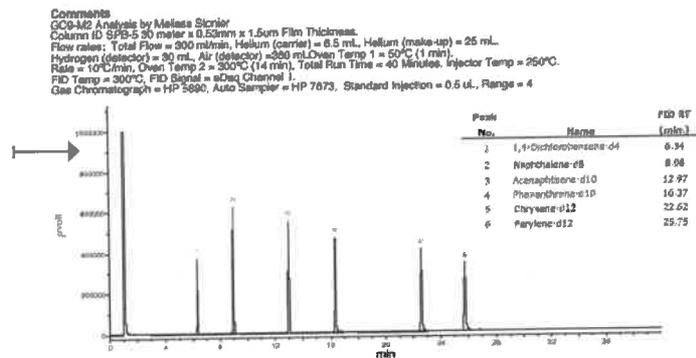
Formulator  
Reviewer

Actual  
Concentration

Uncertainty  
Values

Health &  
Safety

Method of Analysis Run 35, "P10009R L070718 (4000µg/mL in MeCl2)"  
 Run Length: 40.00 min, 23900 points at 10 points/second.  
 Created: Sat, Jul 9, 2016 at 1:54:53 PM.  
 Sampled: Sequence "070816-GC-M2", Method "GC-M2".  
 Analyzed using Method "GC-M2".



Absolute Standards, Inc. and Supina, Inc. have tested and respectively reviewed the analytical data for these products. They are approved for sale as 3rd party reviewed standards. Absolute Standards, Inc. and Supina, Inc. have not established specifications under the terms of agreement for Respective Data Review (RDAR™).

Absolute Standards, Inc. P#10009R L070718  
 Supina, Inc. P#1906 L-AR5989

| Analyte                | Sup/Abs Dev (%) |
|------------------------|-----------------|
| 1,4-Dichlorobenzene-d4 | 2.55            |
| Naphthalene-d8         | 2.43            |
| Acenaphthene-d10       | 3.74            |
| Phenanthrene-d10       | 0.65            |
| Chrysene-d12           | 1.93            |
| Perylene-d12           | -1.72           |
| Total                  | -0.55           |

3rd Party  
Comparison

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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 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**

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

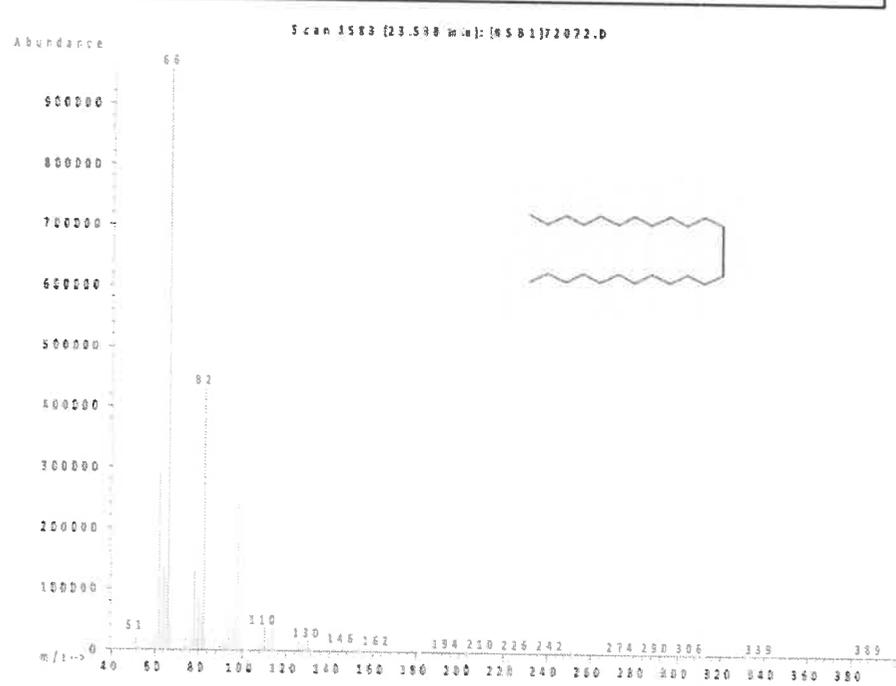
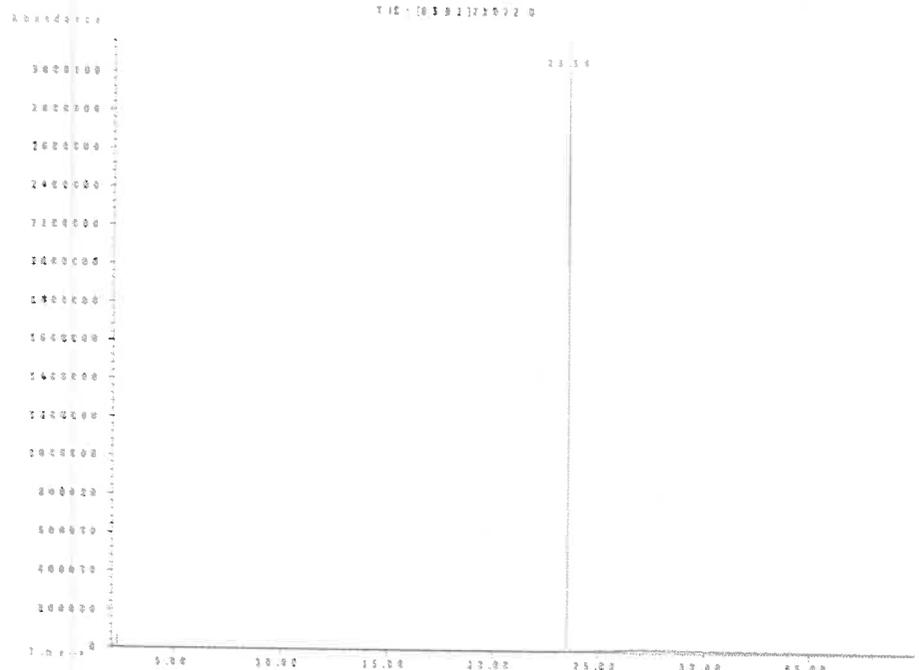
*P13477 } x.p.  
↓  
P13496 } 07/24/24*

|                         |                  |        |
|-------------------------|------------------|--------|
| <i>Prashant Chauhan</i> |                  | 101122 |
| Formulated By:          | Prashant Chauhan | DATE   |
| <i>Pedro L. Rentas</i>  |                  | 101122 |
| Reviewed By:            | Pedro L. Rentas  | DATE   |

Expiration Date: **101132**  
Recommended Storage: **Ambient (20 °C)**  
Nominal Concentration (µg/mL): **1000**  
NIST Test ID#: **6UTB**  
Weight(s) shown below were combined and diluted to (mL): **200.0**  
5E-05 Balance Uncertainty  
0.058 Flask Uncertainty

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

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



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

# ABSOLUTE STANDARDS, INC.

ISO - 17034



## Certificate of Analysis



### Certified Reference Material (CRM)

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

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

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

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

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

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

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

**Uncertainty:** 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  
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 Scope: http://AbsoluteStandards.com

**CERTIFIED WEIGHT REPORT**

Part # 10009R Solvent(s) Methylene chloride Lot# 78702  
 Lot # 070718  
 Description CLP Priority Pollutant Internal Standards GC/MS Calibration - 6 components  
 Expiration Date 070721  
 Recommended Storage Ambient (20 °C)  
 Nominal Concentration (µg/mL) 4000  
 NIST Test ID# 822-275872-11

Weight(s) shown below were combined and diluted to (mL): 500.0 0.058 Balance Uncertainty 5E-05 Mass Uncertainty

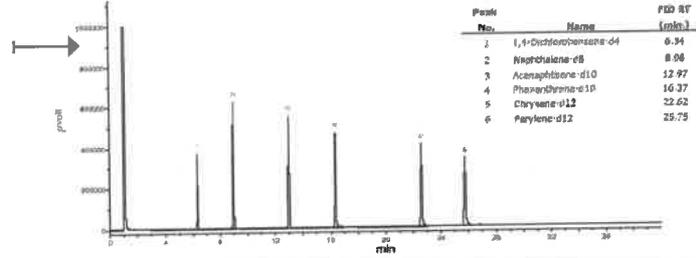
Formulated By: Paul Barron 070718  
 Reviewed By: Pedro L. Rentas 070718

| Compound                  | RM# | Lot Number        | Nominal Conc (µg/mL) | Purity (%) | Uncertainty (%) | Target Weight(µg) | Actual Weight(µg) | Actual Conc (µg/mL) | Expanded Uncertainty (±) (µg/mL) | CAS#       | OSHA PEL (TWA)      | LD50            |
|---------------------------|-----|-------------------|----------------------|------------|-----------------|-------------------|-------------------|---------------------|----------------------------------|------------|---------------------|-----------------|
| 1. 1,4-Dichlorobenzene-d4 | 118 | PR-1845807287CB1  | 4000                 | 99         | 0.2             | 2.04093           | 2.04335           | 4004.7              | 15.4                             | 2855-82-1  | N/A                 | or-rat 500mg/kg |
| 2. Naphthalene-d8         | 223 | PR-23329031612HP1 | 4000                 | 99         | 0.2             | 2.02032           | 2.02084           | 4001.0              | 15.2                             | 1168-85-2  | 10 ppm (50mg/m3/8H) | or-rat 400mg/kg |
| 3. Acenaphthene-d10       | 2   | PR-25444          | 4000                 | 99         | 0.2             | 2.02032           | 2.02245           | 4004.2              | 15.2                             | 15067-25-2 | N/A                 | ip-rat 500mg/kg |
| 4. Phenanthrene-d10       | 248 | PR-23065081711PM1 | 4000                 | 98         | 0.2             | 2.04093           | 2.04135           | 4000.8              | 15.4                             | 1517-25-2  | N/A                 | N/A             |
| 5. Chrysene-d12           | 92  | I-19250           | 4000                 | 98         | 0.2             | 2.04093           | 2.04158           | 4001.3              | 15.4                             | 1719-03-5  | N/A                 | N/A             |
| 6. Perylene-d12           | 247 | PR-24113          | 4000                 | 98         | 0.2             | 2.04093           | 2.04158           | 4001.2              | 15.4                             | 1503-58-3  | N/A                 | N/A             |

MSDB Information (Solvent Safety info. On Attached pg.)

Run 35, "P10009R L070718 (4000µg/mL in MeCl2)"  
 Run Length: 40.00 min, 23900 points at 10 points/second.  
 Created: Sat, Jul 9, 2016 at 1:54:53 PM.  
 Sampled: Sequence 070816-GC0-M2, Method GC0-M2.  
 Analyzed using Method GC0-M2.

Comments: GC0-M2 Analysis by Melissa Sicario  
 Column ID SPB-5 30 meter x 0.53mm x 1.5um Film Thickness.  
 Flow rates: Total Flow = 300 mL/min, Helium (carrier) = 8.5 mL, Helium (make-up) = 25 mL.  
 Hydrogen (detector) = 30 mL, Air (detector) = 300 mL, Oven Temp 1 = 50°C (1 min).  
 Rate = 10°C/min, Oven Temp 2 = 300°C (14 min), Total Run Time = 40 Minutes, Injector Temp = 250°C.  
 PID Temp = 300°C, FID Signal = sData Channel 1.  
 Gas Chromatograph = HP 5890, Auto Sampler = HP 7673, Standard Injection = 0.5 µL, Range = 4



Absolute Standards, Inc. and Supina, Inc. have tested and respectively reviewed the analytical data for these products. They are approved for sale as 3rd party reviewed standards. Absolute Standards, Inc. and Supina, Inc. have not established specifications under the terms of agreement for Respective Data Review (RDR™).

| Analyte                | Sup/Abs Dev (%) |
|------------------------|-----------------|
| 1,4-Dichlorobenzene-d4 | 2.55            |
| Naphthalene-d8         | 2.43            |
| Acenaphthene-d10       | 3.74            |
| Phenanthrene-d10       | 0.65            |
| Chrysene-d12           | 1.93            |
| Perylene-d12           | -1.72           |
| Total                  | -0.55           |

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

Part #  
 Lot #  
 Shelf Life  
 Target Compounds  
 Method of Analysis  
 Qualitative Quantitative

For More Information, Contact:

StephenArpie@AbsoluteStandards.com



CERTIFIED WEIGHT REPORT

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

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

|                         |                  |        |
|-------------------------|------------------|--------|
| <i>Prashant Chauhan</i> |                  | 101122 |
| Formulated By:          | Prashant Chauhan | DATE   |
| <i>Pedro L. Rentas</i>  |                  | 101122 |
| Reviewed By:            | Pedro L. Rentas  | DATE   |

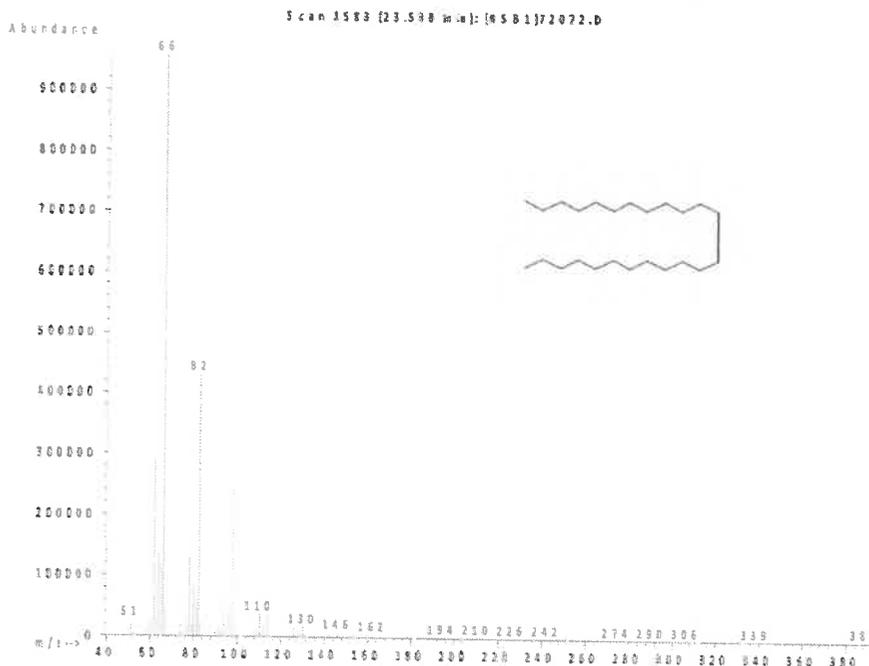
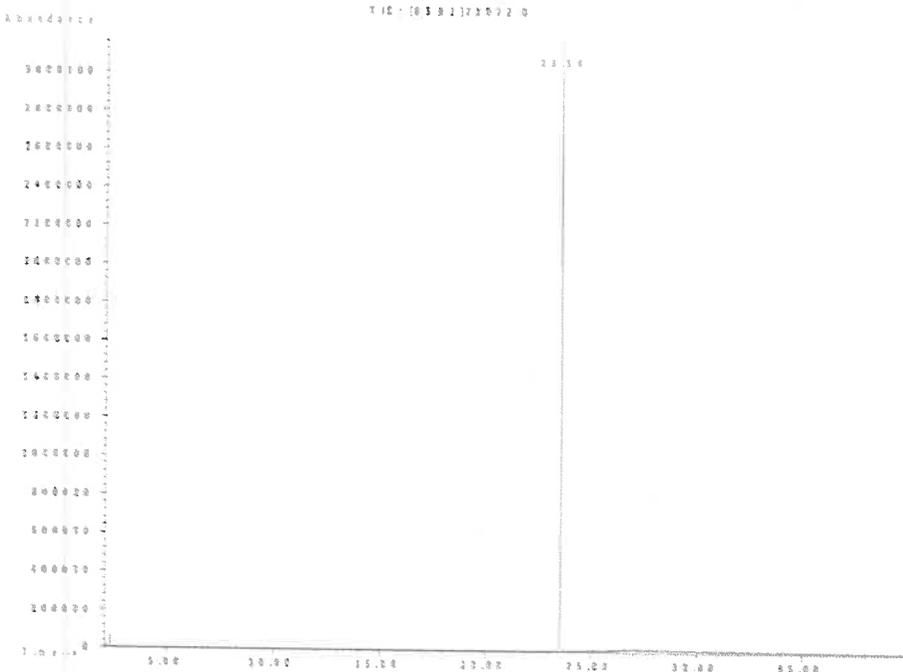
*P13477 } x.p.  
↓  
P13496 } 07/24/24*

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

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

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

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



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

# ABSOLUTE STANDARDS, INC.

ISO - 17034



## Certificate of Analysis



### Certified Reference Material (CRM)

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

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

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

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

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

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

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

**Uncertainty:** 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  
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 Scope: http://AbsoluteStandards.com

**CERTIFIED WEIGHT REPORT**

Part Number: 10009R Solvent(s): Methylene chloride Lot# 78702  
 Lot Number: 070718  
 Description: CLP Priority Pollutant Internal Standards GC/MS Calibration - 6 components  
 Expiration Date: 070721  
 Recommended Storage: Ambient (20 °C)  
 Nominal Concentration (µg/mL): 4000  
 NIST Test ID#: 822-275872-11

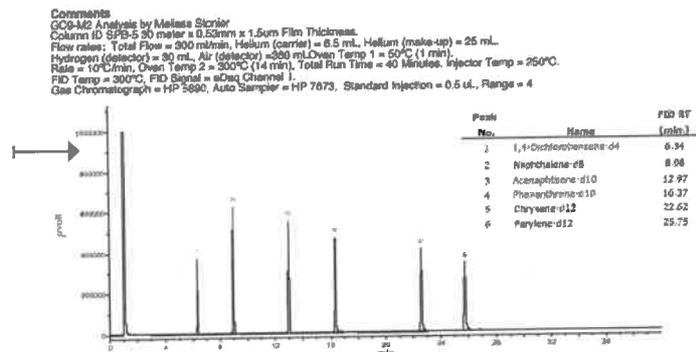
Weight(s) shown below were combined and diluted to (mL): 500.0 0.058 Balance Uncertainty: 0.005 Mass Uncertainty: 0.0005

| Compound                  | RM# | Lot Number        | Nominal Conc (µg/mL) | Purity (%) | Uncertainty (%) | Target Weight(µg) | Actual Weight(µg) | Actual Conc (µg/mL) | Expanded Uncertainty (±) (µg/mL) | CAS#       | OSHA PEL (TWA)      | LD50            |
|---------------------------|-----|-------------------|----------------------|------------|-----------------|-------------------|-------------------|---------------------|----------------------------------|------------|---------------------|-----------------|
| 1. 1,4-Dichlorobenzene-d4 | 118 | PR-1845807287CB1  | 4000                 | 99         | 0.2             | 2.04093           | 2.04335           | 4004.7              | 16.4                             | 2855-82-1  | N/A                 | or-rat 500mg/kg |
| 2. Naphthalene-d8         | 223 | PR-23329031612HP1 | 4000                 | 99         | 0.2             | 2.02032           | 2.02084           | 4001.0              | 16.2                             | 1168-85-2  | 10 ppm (50mg/m3/8H) | or-rat 400mg/kg |
| 3. Acenaphthylene-d10     | 2   | PR-25444          | 4000                 | 99         | 0.2             | 2.02032           | 2.02245           | 4004.2              | 16.2                             | 15067-26-2 | N/A                 | ip-rat 500mg/kg |
| 4. Phenanthrene-d10       | 248 | PR-23065081711PM1 | 4000                 | 98         | 0.2             | 2.04093           | 2.04135           | 4000.8              | 16.4                             | 1517-25-2  | N/A                 | N/A             |
| 5. Chrysene-d12           | 92  | I-19250           | 4000                 | 98         | 0.2             | 2.04093           | 2.04158           | 4001.3              | 16.4                             | 1719-03-5  | N/A                 | N/A             |
| 6. Perylene-d12           | 247 | PR-24112          | 4000                 | 98         | 0.2             | 2.04093           | 2.04158           | 4001.2              | 16.4                             | 1503-58-3  | N/A                 | N/A             |

Part #  
 Lot #  
 Shelf Life  
 Target Compounds

Formulator Reviewer  
 Actual Concentration  
 Uncertainty Values  
 Health & Safety

Method of Analysis: Run 35, "P10009R L070718 (4000µg/mL in MeCl2)"  
 Run Length: 40.00 min, 23900 points at 10 points/second.  
 Created: Sat, Jul 9, 2016 at 1:54:53 PM.  
 Sampled: Sequence "070816-GC0-M2", Method "GC0-M2".  
 Analyzed using Method "GC0-M2".



Qualitative Quantitative

Absolute Standards, Inc. P#10009R L070718  
 Supette, Inc. P#1906 L-AR5569

| Analyte                | Sup/Abs Dev (%) |
|------------------------|-----------------|
| 1,4-Dichlorobenzene-d4 | 2.55            |
| Naphthalene-d8         | 2.43            |
| Acenaphthylene-d10     | 3.74            |
| Phenanthrene-d10       | 0.65            |
| Chrysene-d12           | 1.93            |
| Perylene-d12           | -1.72           |
| Total                  | -0.55           |

3rd Party Comparison

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

For More Information, Contact:

StephenArpie@AbsoluteStandards.com



CERTIFIED WEIGHT REPORT

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

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

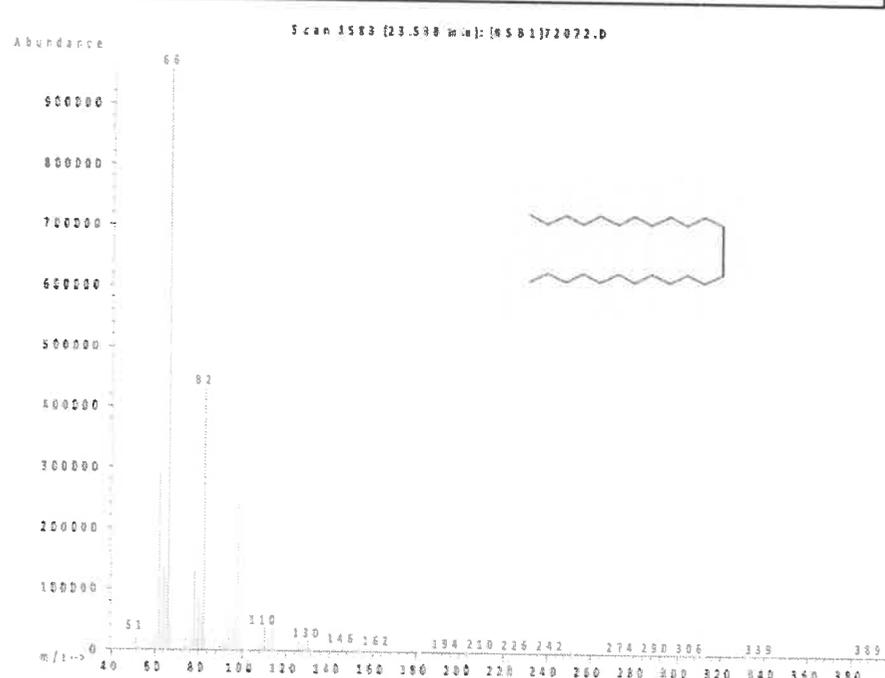
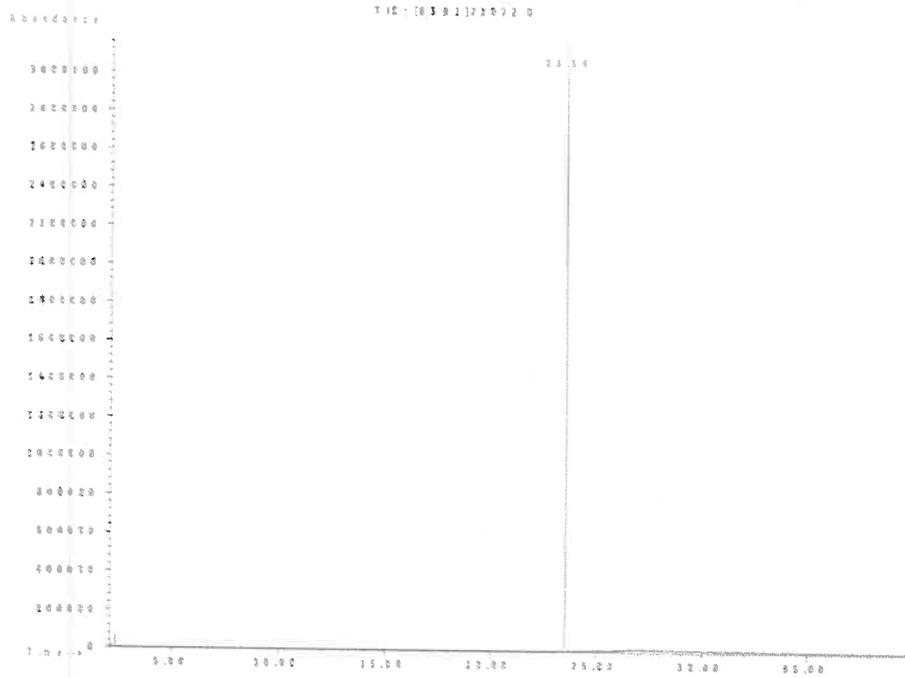
*P13477 } x.p.  
↓  
P13496 } 07/24/24*

|                         |                  |        |
|-------------------------|------------------|--------|
| <i>Prashant Chauhan</i> |                  | 101122 |
| Formulated By:          | Prashant Chauhan | DATE   |
| <i>Pedro L. Rentas</i>  |                  | 101122 |
| Reviewed By:            | Pedro L. Rentas  | DATE   |

Expiration Date: **101132**  
Recommended Storage: **Ambient (20 °C)**  
Nominal Concentration (µg/mL): **1000**  
NIST Test ID#: **6UTB**  
Weight(s) shown below were combined and diluted to (mL): **200.0**  
5E-05 Balance Uncertainty  
0.058 Flask Uncertainty

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

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



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

# ABSOLUTE STANDARDS, INC.

ISO - 17034



## Certificate of Analysis



### Certified Reference Material (CRM)

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

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

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

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

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

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

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

**Uncertainty:** 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  
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 Scope: http://AbsoluteStandards.com

**CERTIFIED WEIGHT REPORT**

Part Number: 10009R Solvent(s): Methylene chloride Lot# 78702  
 Lot Number: 070718  
 Description: CLP Priority Pollutant Internal Standards GC/MS Calibration - 6 components  
 Expiration Date: 070721  
 Recommended Storage: Ambient (20 °C)  
 Nominal Concentration (µg/mL): 4000  
 NIST Test ID#: 822-275872-11

Weight(s) shown below were combined and diluted to (mL): 500.0 0.058 Balance Uncertainty: 0.005 Mass Uncertainty: 0.0005

| Compound                  | RM# | Lot Number        | Nominal Conc (µg/mL) | Purity (%) | Uncertainty Purity (%) | Target Weight(µg) | Actual Weight(µg) | Actual Conc (µg/mL) | Expanded Uncertainty (±) (µg/mL) | CAS#       | OSHA PEL (TWA)      | LD50            |
|---------------------------|-----|-------------------|----------------------|------------|------------------------|-------------------|-------------------|---------------------|----------------------------------|------------|---------------------|-----------------|
| 1. 1,4-Dichlorobenzene-d4 | 118 | PR-1845807287CB1  | 4000                 | 99         | 0.2                    | 2.04093           | 2.04335           | 4004.7              | 16.4                             | 2855-82-1  | N/A                 | or-rat 500mg/kg |
| 2. Naphthalene-d8         | 223 | PR-23329031612HP1 | 4000                 | 99         | 0.2                    | 2.02032           | 2.02084           | 4001.0              | 16.2                             | 1168-85-2  | 10 ppm (50mg/m3/8H) | or-rat 400mg/kg |
| 3. Acenaphthene-d10       | 2   | PR-25444          | 4000                 | 99         | 0.2                    | 2.02032           | 2.02245           | 4004.2              | 16.2                             | 15067-26-2 | N/A                 | ip-rat 500mg/kg |
| 4. Phenanthrene-d10       | 248 | PR-23065081711PM1 | 4000                 | 98         | 0.2                    | 2.04093           | 2.04135           | 4000.8              | 16.4                             | 1517-25-2  | N/A                 | N/A             |
| 5. Chrysene-d12           | 92  | I-19250           | 4000                 | 98         | 0.2                    | 2.04093           | 2.04158           | 4001.3              | 16.4                             | 1718-03-5  | N/A                 | N/A             |
| 6. Perylene-d12           | 247 | PR-24112          | 4000                 | 98         | 0.2                    | 2.04093           | 2.04158           | 4001.2              | 16.4                             | 1503-58-3  | N/A                 | N/A             |

Part #  
Lot #  
Shelf Life

Target Compounds

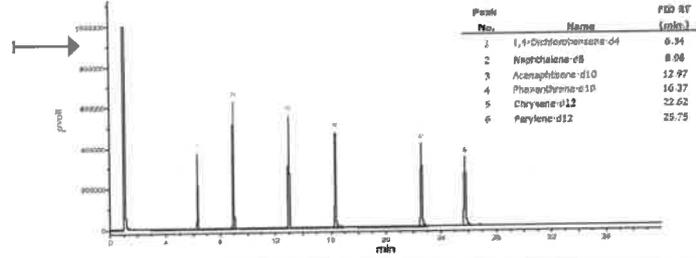
Method of Analysis

Qualitative Quantitative

Formulator Reviewer  
 Actual Concentration  
 Uncertainty Values  
 Health & Safety

MSDB Information (Solvent Safety info. On Attached pg.)  
 Run 35, "P10009R L070718 (4000µg/mL in MeCl2)"  
 Run Length: 40.00 min, 23900 points at 10 points/second.  
 Created: Sat, Jul 9, 2016 at 1:54:53 PM.  
 Sampled: Sequence 070818-GC0-M2, Method GC0-M2.  
 Analyzed using Method GC0-M2.

Comments: GC0-M2 Analysis by Melissa Sicario  
 Column ID SPB-5 30 meter x 0.53mm x 1.5um Film Thickness.  
 Flow rates: Total Flow = 300 mL/min, Helium (carrier) = 8.5 mL, Helium (make-up) = 25 mL.  
 Hydrogen (detector) = 30 mL, Air (detector) = 300 mL, Oven Temp 1 = 50°C (1 min).  
 Rate = 10°C/min, Oven Temp 2 = 300°C (14 min), Total Run Time = 40 Minutes, Injector Temp = 250°C.  
 FID Temp = 300°C, FID Signal = sData Channel 1.  
 Gas Chromatograph = HP 5890, Auto Sampler = HP 7673, Standard Injection = 0.5 µL, Range = 4



Absolute Standards, Inc. PP10009R L070718  
 Supette, Inc. P#1906 L-AR5569

| Analyte                | Sup/Abs Dev (%) |
|------------------------|-----------------|
| 1,4-Dichlorobenzene-d4 | 2.55            |
| Naphthalene-d8         | 2.43            |
| Acenaphthene-d10       | 3.74            |
| Phenanthrene-d10       | 0.65            |
| Chrysene-d12           | 1.93            |
| Perylene-d12           | -1.72           |
| Total                  | -0.55           |

3rd Party Comparison

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

For More Information, Contact:

StephenArpie@AbsoluteStandards.com



CERTIFIED WEIGHT REPORT

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

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

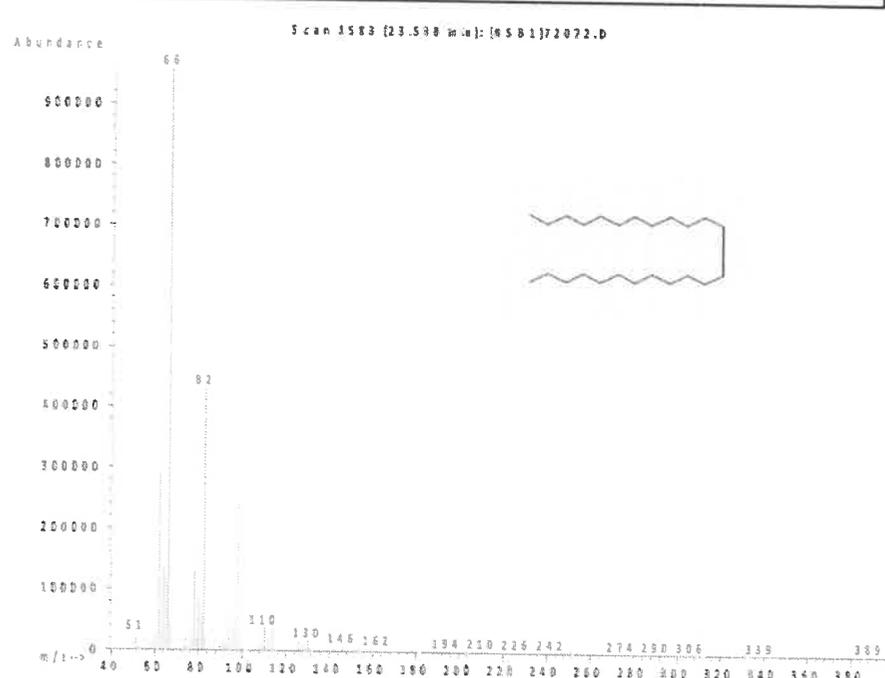
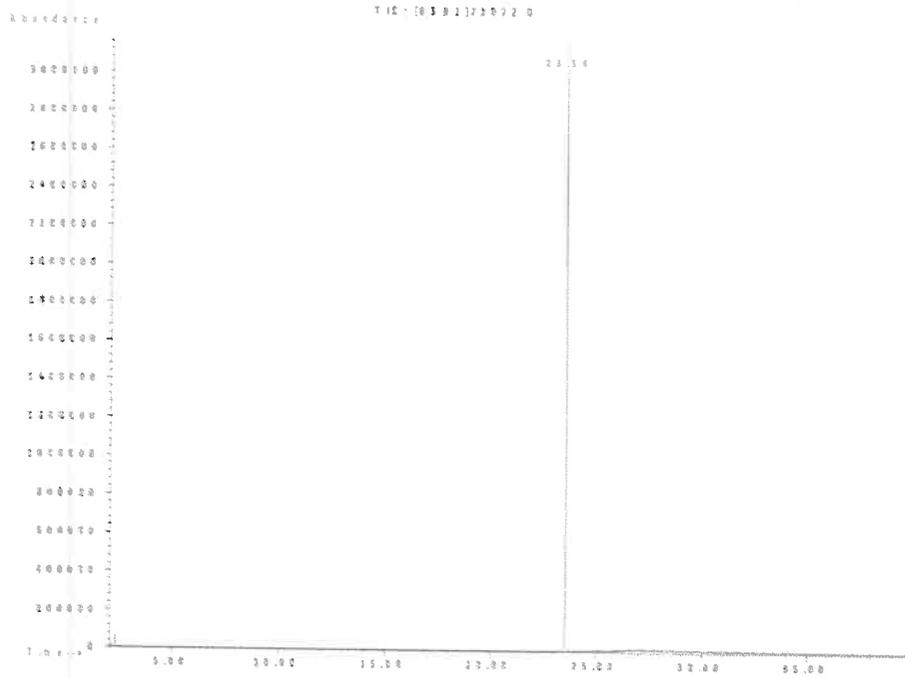
*P13477 } x.p.  
↓  
P13496 } 07/24/24*

|                         |                  |        |
|-------------------------|------------------|--------|
| <i>Prashant Chauhan</i> |                  | 101122 |
| Formulated By:          | Prashant Chauhan | DATE   |
| <i>Pedro L. Rentas</i>  |                  | 101122 |
| Reviewed By:            | Pedro L. Rentas  | DATE   |

Expiration Date: **101132**  
Recommended Storage: **Ambient (20 °C)**  
Nominal Concentration (µg/mL): **1000**  
NIST Test ID#: **6UTB**  
Weight(s) shown below were combined and diluted to (mL): **200.0**  
5E-05 Balance Uncertainty  
0.058 Flask Uncertainty

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

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



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

# ABSOLUTE STANDARDS, INC.

ISO - 17034



## Certificate of Analysis



### Certified Reference Material (CRM)

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

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

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

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

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

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

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

**Uncertainty:** 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  
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 Scope: http://AbsoluteStandards.com

**CERTIFIED WEIGHT REPORT**

Part Number: 10009R Solvent(s): Methylene chloride Lot# 78702  
 Lot Number: 070718  
 Description: CLP Priority Pollutant Internal Standards GC/MS Calibration - 6 components  
 Expiration Date: 070721  
 Recommended Storage: Ambient (20 °C)  
 Nominal Concentration (µg/mL): 4000  
 NIST Test ID#: 822-275872-11

Weight(s) shown below were combined and diluted to (mL): 500.0 0.058 Balance Uncertainty: 0.005 Mass Uncertainty: 0.0005

| Compound                  | RM# | Lot Number        | Nominal Conc (µg/mL) | Purity (%) | Uncertainty (%) | Target Weight(µg) | Actual Weight(µg) | Actual Conc (µg/mL) | Expanded Uncertainty (±) (µg/mL) | CAS#       | OSHA PEL (TWA)      | LD50            |
|---------------------------|-----|-------------------|----------------------|------------|-----------------|-------------------|-------------------|---------------------|----------------------------------|------------|---------------------|-----------------|
| 1. 1,4-Dichlorobenzene-d4 | 118 | PR-1845807287CB1  | 4000                 | 99         | 0.2             | 2.04093           | 2.04335           | 4004.7              | 16.4                             | 2055-92-1  | N/A                 | or-rat 500mg/kg |
| 2. Naphthalene-d8         | 223 | PR-23329031612HP1 | 4000                 | 99         | 0.2             | 2.02032           | 2.02084           | 4001.0              | 16.2                             | 1168-85-2  | 10 ppm (50mg/m3/8H) | or-rat 400mg/kg |
| 3. Acenaphthylene-d10     | 2   | PR-25444          | 4000                 | 99         | 0.2             | 2.02032           | 2.02245           | 4004.2              | 16.2                             | 15067-26-2 | N/A                 | ip-rat 500mg/kg |
| 4. Phenanthrene-d10       | 248 | PR-23065081711PM1 | 4000                 | 98         | 0.2             | 2.04093           | 2.04135           | 4000.8              | 16.4                             | 1517-25-2  | N/A                 | N/A             |
| 5. Chrysene-d12           | 92  | I-19250           | 4000                 | 98         | 0.2             | 2.04093           | 2.04158           | 4001.3              | 16.4                             | 1719-03-5  | N/A                 | N/A             |
| 6. Perylene-d12           | 247 | PR-24112          | 4000                 | 98         | 0.2             | 2.04093           | 2.04158           | 4001.2              | 16.4                             | 1503-58-3  | N/A                 | N/A             |

Part #  
Lot #  
Shelf Life

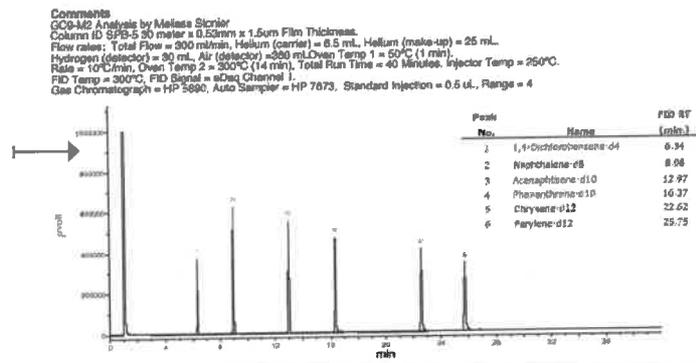
Target Compounds

Method of Analysis

Qualitative Quantitative

Formulator Reviewer  
 Actual Concentration  
 Uncertainty Values  
 Health & Safety

Run 35, "P10009R L070718 (4000µg/mL in MeCl2)"  
 Run Length: 40.00 min, 23900 points at 10 points/second.  
 Created: Sat, Jul 9, 2016 at 1:54:53 PM.  
 Sampled: Sequence 070818-GC0-N2, Method GC0-N2.  
 Analyzed using Method GC0-N2.



Absolute Standards, Inc. and Supina, Inc. have tested and respectively reviewed the analytical data for these products. They are approved for sale as 3rd party reviewed standards. Absolute Standards, Inc. and Supina, Inc. have not established specifications under the terms of agreement for Respective Data Review (RDAR™).

| Analyte                | Sup/Abs Dev (%) |
|------------------------|-----------------|
| 1,4-Dichlorobenzene-d4 | 2.55            |
| Naphthalene-d8         | 2.43            |
| Acenaphthylene-d10     | 3.74            |
| Phenanthrene-d10       | 0.65            |
| Chrysene-d12           | 1.93            |
| Perylene-d12           | -1.72           |
| Total                  | -0.55           |

3rd Party Comparison

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

For More Information, Contact:

StephenArpie@AbsoluteStandards.com



CERTIFIED WEIGHT REPORT

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

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

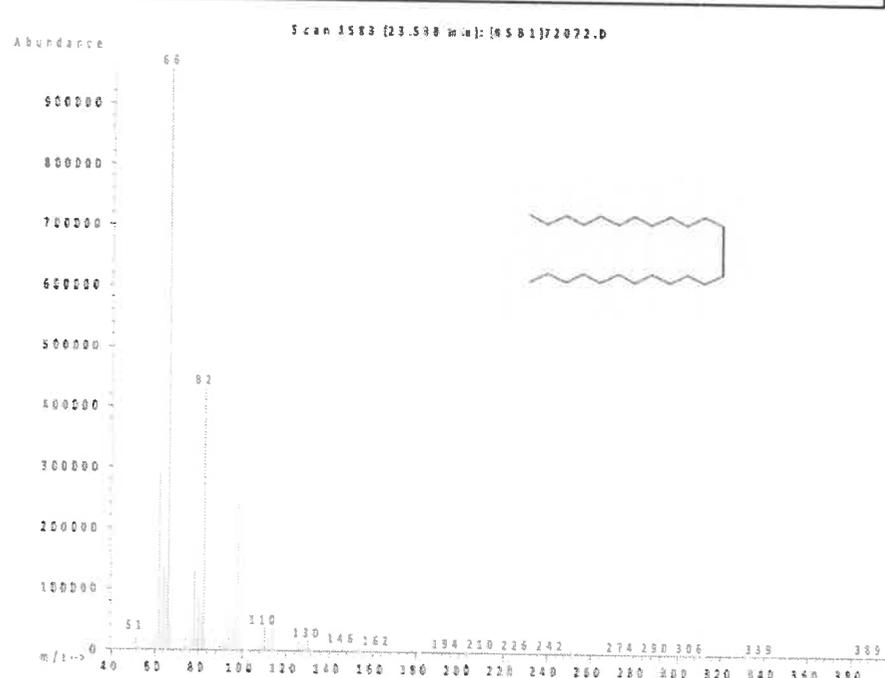
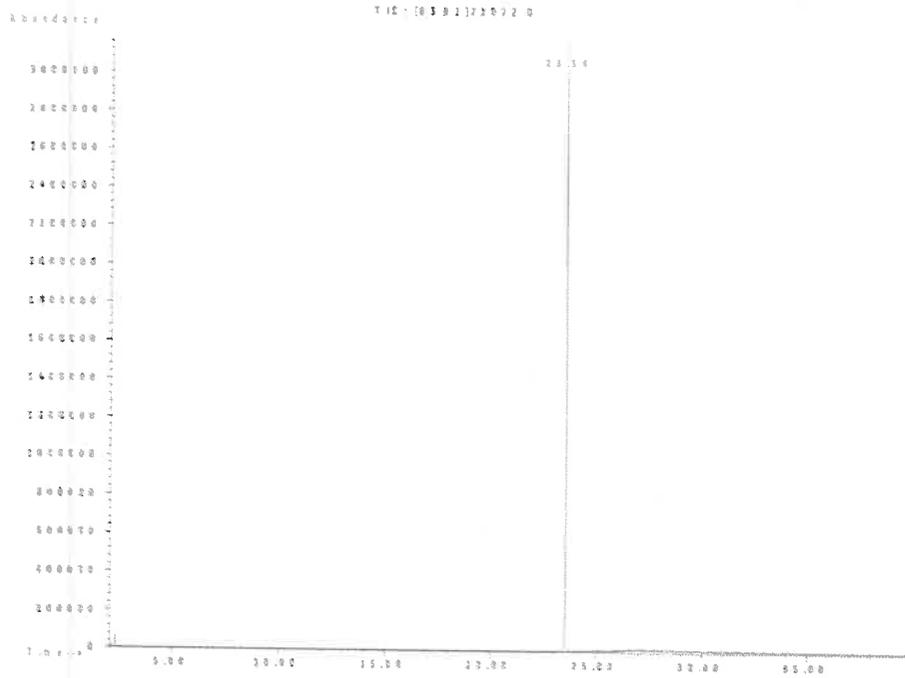
*P13477 } x.p.  
↓  
P13496 } 07/24/24*

|                         |                  |        |
|-------------------------|------------------|--------|
| <i>Prashant Chauhan</i> |                  | 101122 |
| Formulated By:          | Prashant Chauhan | DATE   |
| <i>Pedro L. Rentas</i>  |                  | 101122 |
| Reviewed By:            | Pedro L. Rentas  | DATE   |

Expiration Date: **101132**  
Recommended Storage: **Ambient (20 °C)**  
Nominal Concentration (µg/mL): **1000**  
NIST Test ID#: **6UTB**  
Weight(s) shown below were combined and diluted to (mL): **200.0**  
5E-05 Balance Uncertainty  
0.058 Flask Uncertainty

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

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



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

# ABSOLUTE STANDARDS, INC.

ISO - 17034



## Certificate of Analysis



### Certified Reference Material (CRM)

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

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

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

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

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

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

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

**Uncertainty:** 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  
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 Scope: http://AbsoluteStandards.com

**CERTIFIED WEIGHT REPORT**

Part # 10009R Solvent(s) Methylene chloride Lot# 78702  
 Lot # 070718  
 Description CLP Priority Pollutant Internal Standards  
 GC/MS Calibration - 6 components  
 Expiration Date: 070721  
 Recommended Storage: Ambient (20 °C)  
 Nominal Concentration (µg/mL): 4000  
 NIST Test ID#: 822-275872-11

Weight(s) shown below were combined and diluted to (mL): 500.0 0.058 Balance Uncertainty: 0.005 Mass Uncertainty: 0.0005

Formulated By: Paul Barron DATE: 070718  
 Reviewed By: Pedro L. Rentas DATE: 070718

| Compound                  | RM# | Lot Number        | Nominal Conc (µg/mL) | Purity (%) | Uncertainty (%) | Target Weight(µg) | Actual Weight(µg) | Actual Conc (µg/mL) | Expanded Uncertainty (±) (µg/mL) | CAS#       | OSHA PEL (TWA)      | LD50             |
|---------------------------|-----|-------------------|----------------------|------------|-----------------|-------------------|-------------------|---------------------|----------------------------------|------------|---------------------|------------------|
| 1. 1,4-Dichlorobenzene-d4 | 118 | PR-1845807287CB1  | 4000                 | 99         | 0.2             | 2.04093           | 2.04335           | 4004.7              | 16.4                             | 2855-82-1  | N/A                 | or-rat 500mg/kg  |
| 2. Naphthalene-d8         | 223 | PR-23329031612HP1 | 4000                 | 99         | 0.2             | 2.02032           | 2.02084           | 4001.0              | 16.2                             | 1168-85-2  | 10 ppm (50mg/m3/8H) | or-rat 400mg/kg  |
| 3. Acenaphthene-d10       | 2   | PR-25444          | 4000                 | 99         | 0.2             | 2.02032           | 2.02245           | 4004.2              | 16.2                             | 15067-26-2 | N/A                 | ipr-rat 500mg/kg |
| 4. Phenanthrene-d10       | 248 | PR-23065081711PM1 | 4000                 | 98         | 0.2             | 2.04093           | 2.04135           | 4000.8              | 16.4                             | 1517-25-2  | N/A                 | N/A              |
| 5. Chrysene-d12           | 92  | I-19250           | 4000                 | 98         | 0.2             | 2.04093           | 2.04158           | 4001.3              | 16.4                             | 1718-03-5  | N/A                 | N/A              |
| 6. Perylene-d12           | 247 | PR-24112          | 4000                 | 98         | 0.2             | 2.04093           | 2.04158           | 4001.2              | 16.4                             | 1503-58-3  | N/A                 | N/A              |

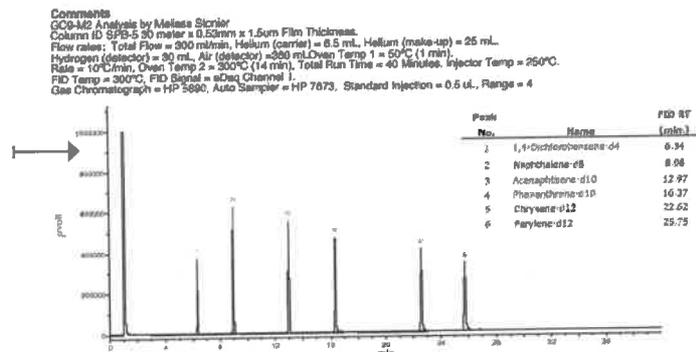
Formulator Reviewer

Actual Concentration

Uncertainty Values

Health & Safety

Method of Analysis Run 35, "P10009R L070718 (4000µg/mL in MeCl2)"  
 Run Length: 40.00 min, 23900 points at 10 points/second.  
 Created: Sat, Jul 9, 2016 at 1:54:53 PM.  
 Sampled: Sequence "070818-GC0-M2", Method "GC0-M2".  
 Analyzed using Method "GC0-M2".



Absolute Standards, Inc. and Supina, Inc. have tested and independently reviewed the analytical data for these products. They are approved for sale as third party reviewed standards. Absolute Standards, Inc. and Supina, Inc. have not established specifications under the terms of agreement for Respected Data Review (RDR™).

| Analyte                | Sup/Abs Dev (%) |
|------------------------|-----------------|
| 1,4-Dichlorobenzene-d4 | 2.55            |
| Naphthalene-d8         | 2.43            |
| Acenaphthene-d10       | 3.74            |
| Phenanthrene-d10       | 0.65            |
| Chrysene-d12           | 1.93            |
| Perylene-d12           | -1.72           |
| Total                  | -0.55           |

3rd Party Comparison

Qualitative Quantitative

Target Compounds

Part # Lot # Shelf Life

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

For More Information, Contact:

StephenArpie@AbsoluteStandards.com



CERTIFIED WEIGHT REPORT

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

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

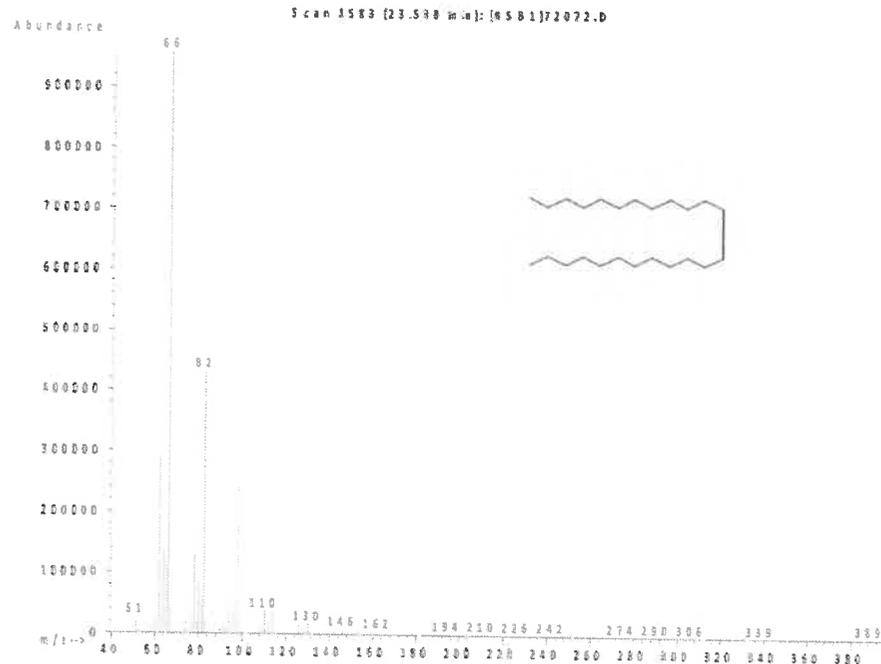
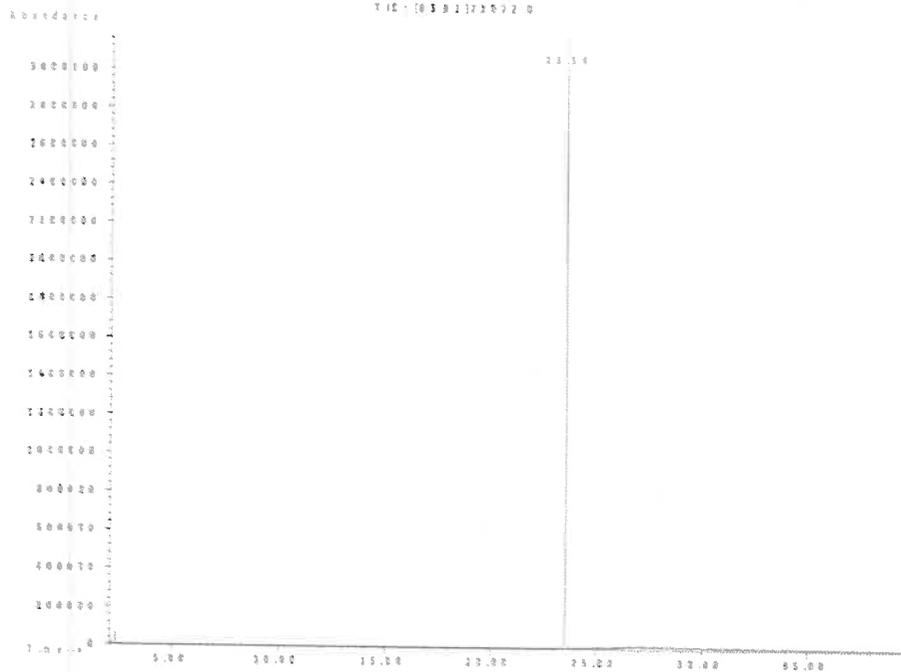
*P13477 } x.p.  
↓  
P13496 } 07/24/24*

|                         |                  |        |
|-------------------------|------------------|--------|
| <i>Prashant Chauhan</i> |                  | 101122 |
| Formulated By:          | Prashant Chauhan | DATE   |
| <i>Pedro L. Rentas</i>  |                  | 101122 |
| Reviewed By:            | Pedro L. Rentas  | DATE   |

Expiration Date: **101132**  
Recommended Storage: **Ambient (20 °C)**  
Nominal Concentration (µg/mL): **1000**  
NIST Test ID#: **6UTB**  
Weight(s) shown below were combined and diluted to (mL): **200.0**  
**5E-05** Balance Uncertainty  
**0.058** Flask Uncertainty

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

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



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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG051325\  
 Data File : FG015822.D  
 Signal(s) : FID1A.ch  
 Acq On : 13 May 2025 14:38  
 Operator : YP\AJ  
 Sample : Q1872-14  
 Misc :  
 ALS Vial : 23 Sample Multiplier: 1

**Instrument :**  
 FID\_G  
**ClientSampleId :**  
 HW0425-PT-DIES-SOIL

**Manual Integrations**  
**APPROVED**  
 Reviewed By :Yogesh Patel 05/14/2025  
 Supervised By :mohammad ahmed 05/15/2025

Integration File: autoint1.e  
 Quant Time: May 14 03:55:05 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
 Quant Title :  
 QLast Update : Thu Apr 24 12:54:09 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

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

| Compound                      | R.T.   | Response | Conc Units   |
|-------------------------------|--------|----------|--------------|
| -----                         |        |          |              |
| System Monitoring Compounds   |        |          |              |
| 9) S TETRACOSANE-d50 (SURR... | 14.997 | 1134285  | 9.634 ug/mlm |

Target Compounds

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

- 1
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- 6
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- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG051325\  
Data File : FG015822.D  
Signal(s) : FID1A.ch  
Acq On : 13 May 2025 14:38  
Operator : YP\AJ  
Sample : Q1872-14  
Misc :  
ALS Vial : 23 Sample Multiplier: 1

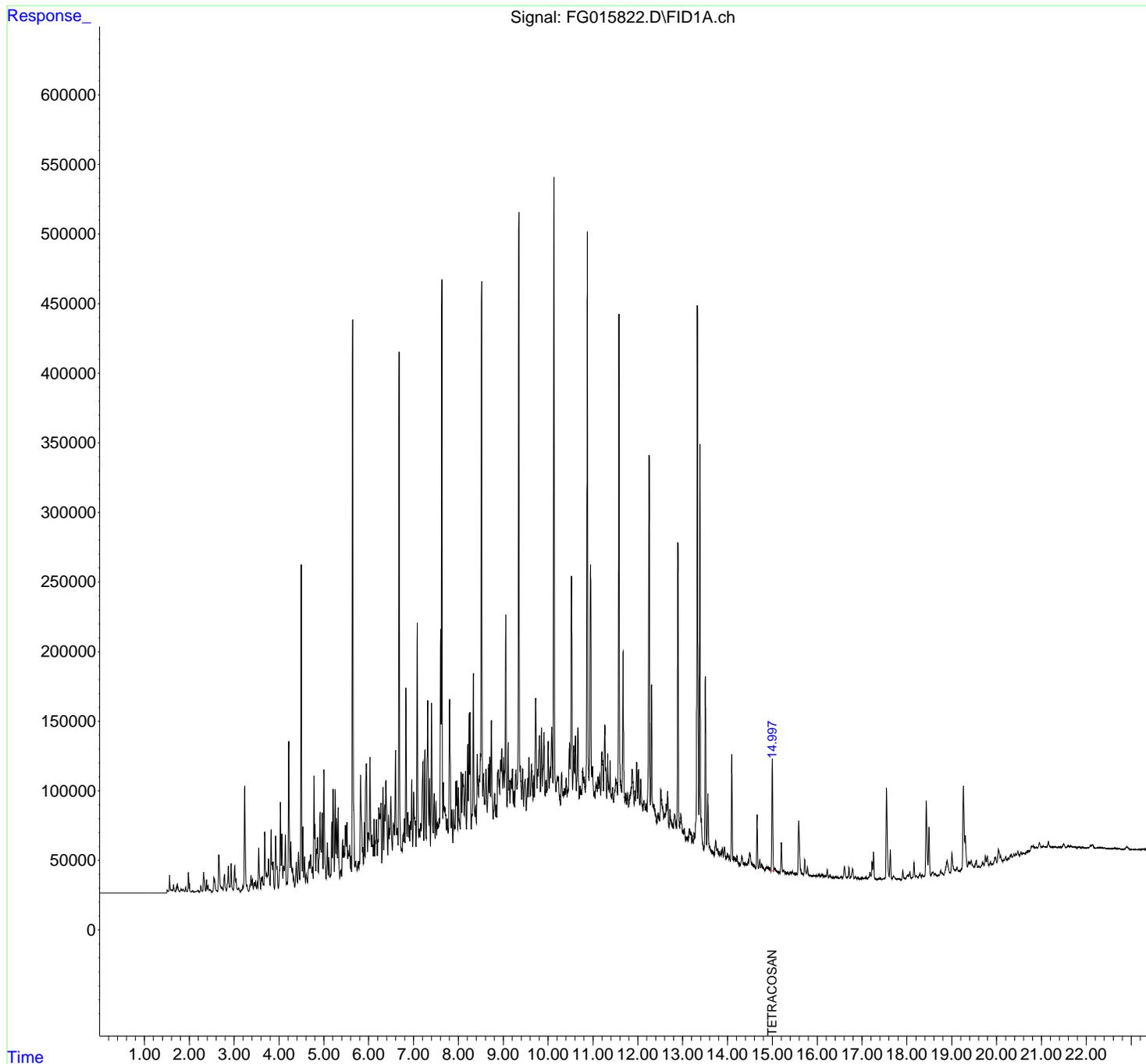
Instrument :  
FID\_G  
ClientSampleId :  
HW0425-PT-DIES-SOIL

Manual Integrations  
APPROVED

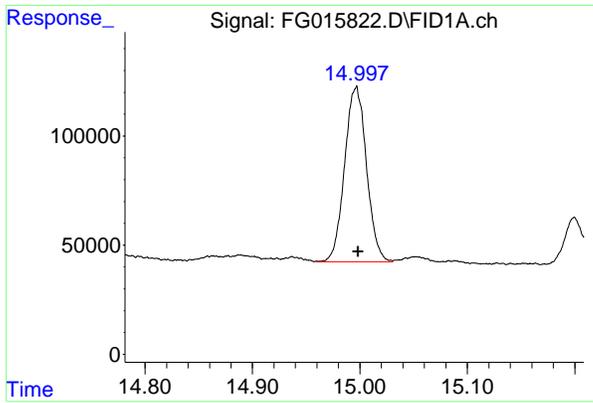
Reviewed By :Yogesh Patel 05/14/2025  
Supervised By :mohammad ahmed 05/15/2025

Integration File: autoint1.e  
Quant Time: May 14 03:55:05 2025  
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
Quant Title :  
QLast Update : Thu Apr 24 12:54:09 2025  
Response via : Initial Calibration  
Integrator: ChemStation

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



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#9 TETRACOSANE-d50 (SURROGATE)

R.T.: 14.997 min  
 Delta R.T.: -0.002 min  
 Response: 1134285  
 Conc: 9.63 ug/ml

Instrument :

FID\_G

Client SampleId :

HW0425-PT-DIES-SOIL

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 05/14/2025

Supervised By :mohammad ahmed 05/15/2025

- 1
- 2
- 3
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- 17
- 18

nteres

Instrument :  
FID\_G  
ClientSampleId :  
HW0425-PT-DIES-SOIL

Area Percent Report

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 05/14/2025  
Supervised By :mohammad ahmed 05/15/2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_G\Data\FG05132  
Data File : FG015822.D  
Signal (s) : FID1A.ch  
Acq On : 13 May 2025 14:38  
Sample : Q1872-14  
Misc :  
ALS Vial : 23 Sample Multiplier: 1

Integration File: Sample.e

Method : Z:\pestpcbsrv\HPCHEM1\FID\_G\Method\FG042425.M  
Title :

Signal : FID1A.ch

| peak # | R. T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|--------|-----------|-----------|---------|-------|-------------|-----------|-------------|------------|
| 1      | 4.217     | 4.200     | 4.248   | BV    | 93713       | 1184692   | 14.79%      | 0.310%     |
| 2      | 4.264     | 4.248     | 4.292   | VV    | 25669       | 346257    | 4.32%       | 0.091%     |
| 3      | 4.303     | 4.292     | 4.321   | VV    | 9485        | 113061    | 1.41%       | 0.030%     |
| 4      | 4.330     | 4.321     | 4.352   | VV    | 5429        | 46534     | 0.58%       | 0.012%     |
| 5      | 4.386     | 4.352     | 4.414   | PV    | 18037       | 293773    | 3.67%       | 0.077%     |
| 6      | 4.434     | 4.414     | 4.461   | VV    | 25271       | 387833    | 4.84%       | 0.101%     |
| 7      | 4.496     | 4.461     | 4.518   | VV    | 231805      | 2659217   | 33.19%      | 0.695%     |
| 8      | 4.533     | 4.518     | 4.552   | VV    | 43490       | 489875    | 6.11%       | 0.128%     |
| 9      | 4.570     | 4.552     | 4.590   | VV    | 21703       | 291995    | 3.64%       | 0.076%     |
| 10     | 4.606     | 4.590     | 4.635   | VV    | 9166        | 169199    | 2.11%       | 0.044%     |
| 11     | 4.671     | 4.635     | 4.690   | VV    | 18198       | 429031    | 5.36%       | 0.112%     |
| 12     | 4.705     | 4.690     | 4.736   | VV    | 23342       | 458276    | 5.72%       | 0.120%     |
| 13     | 4.748     | 4.736     | 4.762   | VV    | 14582       | 173083    | 2.16%       | 0.045%     |
| 14     | 4.781     | 4.762     | 4.794   | VV    | 79634       | 866328    | 10.81%      | 0.226%     |
| 15     | 4.803     | 4.794     | 4.821   | VV    | 44824       | 488364    | 6.10%       | 0.128%     |
| 16     | 4.838     | 4.821     | 4.847   | VV    | 27314       | 340474    | 4.25%       | 0.089%     |
| 17     | 4.859     | 4.847     | 4.876   | VV    | 35737       | 440526    | 5.50%       | 0.115%     |
| 18     | 4.915     | 4.876     | 4.943   | VV    | 53891       | 1131876   | 14.13%      | 0.296%     |
| 19     | 4.961     | 4.943     | 4.982   | VV    | 53284       | 777919    | 9.71%       | 0.203%     |
| 20     | 5.003     | 4.982     | 5.048   | VV    | 84120       | 1341612   | 16.75%      | 0.351%     |
| 21     | 5.079     | 5.048     | 5.097   | VV    | 31509       | 496937    | 6.20%       | 0.130%     |
| 22     | 5.112     | 5.097     | 5.140   | VV    | 21280       | 340327    | 4.25%       | 0.089%     |
| 23     | 5.176     | 5.140     | 5.190   | VV    | 46580       | 625713    | 7.81%       | 0.164%     |
| 24     | 5.208     | 5.190     | 5.234   | VV    | 70143       | 1122944   | 14.02%      | 0.294%     |
| 25     | 5.253     | 5.234     | 5.269   | VV    | 69781       | 847193    | 10.57%      | 0.221%     |
| 26     | 5.285     | 5.269     | 5.304   | VV    | 49210       | 735337    | 9.18%       | 0.192%     |
| 27     | 5.319     | 5.304     | 5.356   | VV    | 56687       | 835436    | 10.43%      | 0.218%     |
| 28     | 5.370     | 5.356     | 5.378   | VV    | 11107       | 125272    | 1.56%       | 0.033%     |
| 29     | 5.382     | 5.378     | 5.396   | VV    | 11250       | 105026    | 1.31%       | 0.027%     |
| 30     | 5.418     | 5.396     | 5.431   | VV    | 33352       | 468471    | 5.85%       | 0.122%     |
| 31     | 5.441     | 5.431     | 5.455   | VV    | 29212       | 352285    | 4.40%       | 0.092%     |
| 32     | 5.483     | 5.455     | 5.502   | VV    | 44020       | 939337    | 11.72%      | 0.246%     |
| 33     | 5.515     | 5.502     | 5.531   | VV    | 46085       | 587568    | 7.33%       | 0.154%     |
| 34     | 5.542     | 5.531     | 5.559   | VV    | 25587       | 400092    | 4.99%       | 0.105%     |
| 35     | 5.578     | 5.559     | 5.593   | VV    | 29845       | 457369    | 5.71%       | 0.120%     |
| 36     | 5.605     | 5.593     | 5.618   | VV    | 21977       | 248739    | 3.10%       | 0.065%     |

|    | riteres |        |        |    |        |         |         |         |
|----|---------|--------|--------|----|--------|---------|---------|---------|
| 37 | 5. 643  | 5. 618 | 5. 690 | VV | 406940 | 5504863 | 68. 71% | 1. 439% |
| 38 | 5. 711  | 5. 690 | 5. 745 | VV | 17863  | 502798  |         |         |
| 39 | 5. 769  | 5. 745 | 5. 781 | VV | 18076  | 327020  |         |         |
| 40 | 5. 792  | 5. 781 | 5. 800 | VV | 18077  | 185276  |         |         |
| 41 | 5. 820  | 5. 800 | 5. 859 | VV | 79645  | 1661596 | 20      |         |
| 42 | 5. 867  | 5. 859 | 5. 885 | VV | 28099  | 353584  | 4       |         |
| 43 | 5. 905  | 5. 885 | 5. 918 | VV | 45984  | 601370  | 7. 51%  | 0. 157% |
| 44 | 5. 947  | 5. 918 | 5. 977 | VV | 87206  | 2085707 | 26. 03% | 0. 545% |
| 45 | 5. 989  | 5. 977 | 5. 997 | VV | 38468  | 395284  | 4. 93%  | 0. 103% |
| 46 | 6. 005  | 5. 997 | 6. 012 | VV | 37718  | 334323  | 4. 17%  | 0. 087% |
| 47 | 6. 029  | 6. 012 | 6. 061 | VV | 92466  | 1569878 | 19. 60% | 0. 410% |
| 48 | 6. 074  | 6. 061 | 6. 089 | VV | 36728  | 526927  | 6. 58%  | 0. 138% |
| 49 | 6. 093  | 6. 089 | 6. 106 | VV | 29164  | 274290  | 3. 42%  | 0. 072% |
| 50 | 6. 121  | 6. 106 | 6. 137 | VV | 47941  | 641203  | 8. 00%  | 0. 168% |
| 51 | 6. 149  | 6. 137 | 6. 154 | VV | 31317  | 294829  | 3. 68%  | 0. 077% |
| 52 | 6. 174  | 6. 154 | 6. 193 | VV | 47897  | 845127  | 10. 55% | 0. 221% |
| 53 | 6. 207  | 6. 193 | 6. 212 | VV | 32606  | 327989  | 4. 09%  | 0. 086% |
| 54 | 6. 229  | 6. 212 | 6. 245 | VV | 56066  | 973321  | 12. 15% | 0. 254% |
| 55 | 6. 253  | 6. 245 | 6. 260 | VV | 51995  | 456685  | 5. 70%  | 0. 119% |
| 56 | 6. 273  | 6. 260 | 6. 293 | VV | 59663  | 839092  | 10. 47% | 0. 219% |
| 57 | 6. 320  | 6. 293 | 6. 338 | VV | 70980  | 1126426 | 14. 06% | 0. 295% |
| 58 | 6. 358  | 6. 338 | 6. 371 | VV | 57967  | 923267  | 11. 52% | 0. 241% |
| 59 | 6. 384  | 6. 371 | 6. 428 | VV | 75532  | 1787153 | 22. 31% | 0. 467% |
| 60 | 6. 444  | 6. 428 | 6. 457 | VV | 50924  | 670781  | 8. 37%  | 0. 175% |
| 61 | 6. 468  | 6. 457 | 6. 476 | VV | 41352  | 445482  | 5. 56%  | 0. 116% |
| 62 | 6. 495  | 6. 476 | 6. 530 | VV | 64255  | 1415580 | 17. 67% | 0. 370% |
| 63 | 6. 549  | 6. 530 | 6. 575 | VV | 45199  | 1053428 | 13. 15% | 0. 275% |
| 64 | 6. 600  | 6. 575 | 6. 625 | VV | 97509  | 1761651 | 21. 99% | 0. 461% |
| 65 | 6. 642  | 6. 625 | 6. 656 | VV | 41414  | 686601  | 8. 57%  | 0. 180% |
| 66 | 6. 679  | 6. 656 | 6. 724 | VV | 383104 | 4933068 | 61. 57% | 1. 290% |
| 67 | 6. 733  | 6. 724 | 6. 749 | VV | 26319  | 374057  | 4. 67%  | 0. 098% |
| 68 | 6. 768  | 6. 749 | 6. 780 | VV | 36387  | 614418  | 7. 67%  | 0. 161% |
| 69 | 6. 797  | 6. 780 | 6. 812 | VV | 48125  | 745338  | 9. 30%  | 0. 195% |
| 70 | 6. 832  | 6. 812 | 6. 855 | VV | 142141 | 2099259 | 26. 20% | 0. 549% |
| 71 | 6. 872  | 6. 855 | 6. 894 | VV | 52040  | 1041100 | 12. 99% | 0. 272% |
| 72 | 6. 904  | 6. 894 | 6. 917 | VV | 43006  | 535667  | 6. 69%  | 0. 140% |
| 73 | 6. 936  | 6. 917 | 6. 946 | VV | 46021  | 721637  | 9. 01%  | 0. 189% |
| 74 | 6. 961  | 6. 946 | 6. 982 | VV | 75670  | 1096078 | 13. 68% | 0. 287% |
| 75 | 7. 004  | 6. 982 | 7. 033 | VV | 66828  | 1483554 | 18. 52% | 0. 388% |
| 76 | 7. 041  | 7. 033 | 7. 055 | VV | 46393  | 530366  | 6. 62%  | 0. 139% |
| 77 | 7. 083  | 7. 055 | 7. 116 | VV | 188206 | 2905123 | 36. 26% | 0. 760% |
| 78 | 7. 129  | 7. 116 | 7. 142 | VV | 40602  | 584383  | 7. 29%  | 0. 153% |
| 79 | 7. 158  | 7. 142 | 7. 173 | VV | 44659  | 749963  | 9. 36%  | 0. 196% |
| 80 | 7. 209  | 7. 173 | 7. 231 | VV | 88854  | 2112014 | 26. 36% | 0. 552% |
| 81 | 7. 254  | 7. 231 | 7. 282 | VV | 97561  | 1798189 | 22. 44% | 0. 470% |
| 82 | 7. 318  | 7. 282 | 7. 345 | VV | 132872 | 2946230 | 36. 77% | 0. 770% |
| 83 | 7. 360  | 7. 345 | 7. 378 | VV | 76386  | 1073920 | 13. 40% | 0. 281% |
| 84 | 7. 402  | 7. 378 | 7. 438 | VV | 130800 | 2458839 | 30. 69% | 0. 643% |
| 85 | 7. 462  | 7. 438 | 7. 483 | VV | 65918  | 1358017 | 16. 95% | 0. 355% |
| 86 | 7. 501  | 7. 483 | 7. 518 | VV | 60381  | 964483  | 12. 04% | 0. 252% |
| 87 | 7. 531  | 7. 518 | 7. 544 | VV | 44824  | 646081  | 8. 06%  | 0. 169% |
| 88 | 7. 570  | 7. 544 | 7. 582 | VV | 47894  | 1014242 | 12. 66% | 0. 265% |
| 89 | 7. 604  | 7. 582 | 7. 614 | VV | 184433 | 2252280 | 28. 11% | 0. 589% |

Instrument :  
 FID\_G  
 ClientSampleId :  
 HW0425-PT-DIES-SOIL

**Manual IntegrationsAPPROVED**

Reviewed By :Yogesh Patel 05/14/2025  
 Supervised By :mohammad ahmed 05/15/2025

|     | Retention |       | Retention | Retention | Area   | Area    | Area   | Area   |
|-----|-----------|-------|-----------|-----------|--------|---------|--------|--------|
|     | 1         | 2     | 3         | 4         | 5      | 6       | 7      | 8      |
| 90  | 7.631     | 7.614 | 7.652     | VV        | 434648 | 5035198 | 62.85% | 1.316% |
| 91  | 7.664     | 7.652 | 7.689     | VV        | 73634  | 1325144 | 16.95% | 0.418% |
| 92  | 7.699     | 7.689 | 7.713     | VV        | 55594  | 768238  | 9.07%  | 0.228% |
| 93  | 7.717     | 7.713 | 7.733     | VV        | 51022  | 564186  | 7.29%  | 0.197% |
| 94  | 7.752     | 7.733 | 7.769     | VV        | 47667  | 929097  | 11.95% | 0.297% |
| 95  | 7.772     | 7.769 | 7.777     | VV        | 38574  | 168053  | 5.03%  | 0.133% |
| 96  | 7.803     | 7.777 | 7.839     | VV        | 133170 | 2971475 | 37.09% | 0.777% |
| 97  | 7.855     | 7.839 | 7.878     | VV        | 54048  | 1050682 | 13.11% | 0.275% |
| 98  | 7.897     | 7.878 | 7.912     | VV        | 54130  | 871416  | 10.88% | 0.228% |
| 99  | 7.920     | 7.912 | 7.927     | VV        | 42090  | 370102  | 4.62%  | 0.097% |
| 100 | 7.945     | 7.927 | 7.956     | VV        | 74505  | 1044054 | 13.03% | 0.273% |
| 101 | 7.969     | 7.956 | 7.986     | VV        | 74883  | 1094248 | 13.66% | 0.286% |
| 102 | 8.001     | 7.986 | 8.042     | VV        | 69459  | 1696917 | 21.18% | 0.444% |
| 103 | 8.062     | 8.042 | 8.078     | VV        | 81199  | 1351395 | 16.87% | 0.353% |
| 104 | 8.098     | 8.078 | 8.130     | VV        | 79626  | 2075165 | 25.90% | 0.543% |
| 105 | 8.159     | 8.130 | 8.179     | VV        | 81486  | 1781788 | 22.24% | 0.466% |
| 106 | 8.207     | 8.179 | 8.223     | VV        | 101000 | 1824658 | 22.78% | 0.477% |
| 107 | 8.240     | 8.223 | 8.252     | VV        | 123595 | 1598193 | 19.95% | 0.418% |
| 108 | 8.264     | 8.252 | 8.288     | VV        | 123757 | 1739471 | 21.71% | 0.455% |
| 109 | 8.334     | 8.288 | 8.368     | VV        | 151816 | 3470653 | 43.32% | 0.907% |
| 110 | 8.384     | 8.368 | 8.401     | VV        | 56733  | 1037422 | 12.95% | 0.271% |
| 111 | 8.422     | 8.401 | 8.452     | VV        | 93422  | 2164535 | 27.02% | 0.566% |
| 112 | 8.467     | 8.452 | 8.475     | VV        | 77653  | 1029950 | 12.86% | 0.269% |
| 113 | 8.518     | 8.475 | 8.541     | VV        | 432430 | 6763204 | 84.42% | 1.768% |
| 114 | 8.562     | 8.541 | 8.580     | VV        | 79574  | 1637359 | 20.44% | 0.428% |
| 115 | 8.588     | 8.580 | 8.598     | VV        | 60403  | 624909  | 7.80%  | 0.163% |
| 116 | 8.616     | 8.598 | 8.644     | VV        | 82501  | 1895102 | 23.65% | 0.495% |
| 117 | 8.675     | 8.644 | 8.689     | VV        | 85674  | 1904025 | 23.77% | 0.498% |
| 118 | 8.701     | 8.689 | 8.718     | VV        | 90547  | 1309168 | 16.34% | 0.342% |
| 119 | 8.736     | 8.718 | 8.777     | VV        | 117417 | 2744700 | 34.26% | 0.718% |
| 120 | 8.809     | 8.777 | 8.832     | VV        | 64920  | 1843471 | 23.01% | 0.482% |
| 121 | 8.845     | 8.832 | 8.856     | VV        | 57127  | 764580  | 9.54%  | 0.200% |
| 122 | 8.876     | 8.856 | 8.884     | VV        | 79899  | 1121943 | 14.00% | 0.293% |
| 123 | 8.891     | 8.884 | 8.902     | VV        | 82193  | 850657  | 10.62% | 0.222% |
| 124 | 8.909     | 8.902 | 8.922     | VV        | 73917  | 847374  | 10.58% | 0.222% |
| 125 | 8.941     | 8.922 | 8.955     | VV        | 88706  | 1622773 | 20.26% | 0.424% |
| 126 | 8.970     | 8.955 | 8.990     | VV        | 97205  | 1799057 | 22.46% | 0.470% |
| 127 | 9.010     | 8.990 | 9.026     | VV        | 91294  | 1703768 | 21.27% | 0.445% |
| 128 | 9.058     | 9.026 | 9.085     | VV        | 193681 | 3772875 | 47.09% | 0.986% |
| 129 | 9.111     | 9.085 | 9.127     | VV        | 101589 | 1895110 | 23.65% | 0.495% |
| 130 | 9.135     | 9.127 | 9.149     | VV        | 74787  | 917100  | 11.45% | 0.240% |
| 131 | 9.170     | 9.149 | 9.176     | VV        | 74166  | 1103058 | 13.77% | 0.288% |
| 132 | 9.181     | 9.176 | 9.192     | VV        | 75037  | 705483  | 8.81%  | 0.184% |
| 133 | 9.206     | 9.192 | 9.227     | VV        | 82534  | 1468215 | 18.33% | 0.384% |
| 134 | 9.240     | 9.227 | 9.256     | VV        | 66386  | 1082046 | 13.51% | 0.283% |
| 135 | 9.286     | 9.256 | 9.308     | VV        | 81729  | 2227561 | 27.80% | 0.582% |
| 136 | 9.348     | 9.308 | 9.371     | VV        | 481461 | 7037198 | 87.84% | 1.840% |
| 137 | 9.380     | 9.371 | 9.411     | VV        | 84963  | 1805862 | 22.54% | 0.472% |
| 138 | 9.434     | 9.411 | 9.456     | VV        | 82102  | 1923268 | 24.01% | 0.503% |
| 139 | 9.490     | 9.456 | 9.512     | VV        | 73979  | 2227846 | 27.81% | 0.582% |
| 140 | 9.546     | 9.512 | 9.559     | VV        | 76104  | 1816650 | 22.68% | 0.475% |
| 141 | 9.575     | 9.559 | 9.603     | VV        | 90845  | 1984225 | 24.77% | 0.519% |

Instrument : FID\_G  
ClientSampleId : HW0425-PT-DIES-SOIL  
Manual Integrations APPROVED  
Reviewed By : Yogesh Patel 05/14/2025  
Supervised By : mohammad ahmed 05/15/2025

|     |        |        |        |    |        |         |         | Instrument :<br>FID_G                    |  |
|-----|--------|--------|--------|----|--------|---------|---------|--|--|
|     |        |        |        |    |        |         |         | ClientSampleId :<br>HW0425-PT-DIES-SOIL  |  |
|     |        |        |        |    |        |         |         | Manual IntegrationsAPPROVED              |  |
|     |        |        |        |    |        |         |         | Reviewed By :Yogesh Patel 05/14/2025     |  |
|     |        |        |        |    |        |         |         | Supervised By :mohammad ahmed 05/15/2025 |  |
|     |        |        |        |    |        |         |         | rteres                                   |  |
| 142 | 9.632  | 9.603  | 9.663  | VV | 85348  | 2602158 | 32.48%  | 0.680%                                   |  |
| 143 | 9.679  | 9.663  | 9.694  | VV | 77195  | 1307798 | 16.42%  | 0.518%                                   |  |
| 144 | 9.724  | 9.694  | 9.755  | VV | 133336 | 3434241 | 42.42%  | 0.680%                                   |  |
| 145 | 9.767  | 9.755  | 9.779  | VV | 81772  | 1095297 | 13.42%  | 0.680%                                   |  |
| 146 | 9.808  | 9.779  | 9.830  | VV | 106057 | 2762356 | 34.42%  | 0.761%                                   |  |
| 147 | 9.855  | 9.830  | 9.874  | VV | 112027 | 2271670 | 28.42%  | 0.761%                                   |  |
| 148 | 9.908  | 9.874  | 9.932  | VV | 108817 | 2912265 | 36.35%  | 0.761%                                   |  |
| 149 | 9.956  | 9.932  | 9.975  | VV | 74217  | 1769245 | 22.08%  | 0.463%                                   |  |
| 150 | 10.001 | 9.975  | 10.028 | VV | 101213 | 2577302 | 32.17%  | 0.674%                                   |  |
| 151 | 10.048 | 10.028 | 10.063 | VV | 83316  | 1621453 | 20.24%  | 0.424%                                   |  |
| 152 | 10.082 | 10.063 | 10.108 | VV | 112026 | 2545015 | 31.77%  | 0.665%                                   |  |
| 153 | 10.133 | 10.108 | 10.179 | VV | 506035 | 7816918 | 97.57%  | 2.044%                                   |  |
| 154 | 10.211 | 10.179 | 10.224 | VV | 76730  | 1979564 | 24.71%  | 0.518%                                   |  |
| 155 | 10.231 | 10.224 | 10.277 | VV | 76240  | 2101069 | 26.23%  | 0.549%                                   |  |
| 156 | 10.302 | 10.277 | 10.333 | VV | 79192  | 2288945 | 28.57%  | 0.598%                                   |  |
| 157 | 10.347 | 10.333 | 10.354 | VV | 65889  | 805278  | 10.05%  | 0.211%                                   |  |
| 158 | 10.373 | 10.354 | 10.388 | VV | 67626  | 1366545 | 17.06%  | 0.357%                                   |  |
| 159 | 10.405 | 10.388 | 10.425 | VV | 76076  | 1541005 | 19.23%  | 0.403%                                   |  |
| 160 | 10.442 | 10.425 | 10.450 | VV | 67492  | 980430  | 12.24%  | 0.256%                                   |  |
| 161 | 10.476 | 10.450 | 10.493 | VV | 99787  | 2178499 | 27.19%  | 0.570%                                   |  |
| 162 | 10.521 | 10.493 | 10.548 | VV | 220305 | 4520778 | 56.43%  | 1.182%                                   |  |
| 163 | 10.572 | 10.548 | 10.592 | VV | 98650  | 2243124 | 28.00%  | 0.586%                                   |  |
| 164 | 10.609 | 10.592 | 10.632 | VV | 105512 | 2045515 | 25.53%  | 0.535%                                   |  |
| 165 | 10.664 | 10.632 | 10.692 | VV | 111688 | 3026489 | 37.78%  | 0.791%                                   |  |
| 166 | 10.712 | 10.692 | 10.729 | VV | 70022  | 1409544 | 17.59%  | 0.369%                                   |  |
| 167 | 10.735 | 10.729 | 10.750 | VV | 65577  | 833457  | 10.40%  | 0.218%                                   |  |
| 168 | 10.771 | 10.750 | 10.795 | VV | 81721  | 2030882 | 25.35%  | 0.531%                                   |  |
| 169 | 10.803 | 10.795 | 10.832 | VV | 75652  | 1581049 | 19.73%  | 0.413%                                   |  |
| 170 | 10.876 | 10.832 | 10.912 | VV | 467409 | 8011607 | 100.00% | 2.095%                                   |  |
| 171 | 10.947 | 10.912 | 10.977 | VV | 227696 | 5009872 | 62.53%  | 1.310%                                   |  |
| 172 | 10.992 | 10.977 | 11.024 | VV | 83815  | 2077485 | 25.93%  | 0.543%                                   |  |
| 173 | 11.034 | 11.024 | 11.045 | VV | 65161  | 796936  | 9.95%   | 0.208%                                   |  |
| 174 | 11.067 | 11.045 | 11.076 | VV | 71583  | 1228002 | 15.33%  | 0.321%                                   |  |
| 175 | 11.084 | 11.076 | 11.098 | VV | 69314  | 933561  | 11.65%  | 0.244%                                   |  |
| 176 | 11.114 | 11.098 | 11.133 | VV | 75623  | 1464813 | 18.28%  | 0.383%                                   |  |
| 177 | 11.153 | 11.133 | 11.173 | VV | 78152  | 1717093 | 21.43%  | 0.449%                                   |  |
| 178 | 11.197 | 11.173 | 11.234 | VV | 92506  | 2986701 | 37.28%  | 0.781%                                   |  |
| 179 | 11.265 | 11.234 | 11.311 | VV | 112810 | 3903421 | 48.72%  | 1.021%                                   |  |
| 180 | 11.329 | 11.311 | 11.363 | VV | 93150  | 2338745 | 29.19%  | 0.611%                                   |  |
| 181 | 11.381 | 11.363 | 11.421 | VV | 87319  | 2444463 | 30.51%  | 0.639%                                   |  |
| 182 | 11.439 | 11.421 | 11.462 | VV | 68709  | 1583673 | 19.77%  | 0.414%                                   |  |
| 183 | 11.509 | 11.462 | 11.549 | VV | 74581  | 3495183 | 43.63%  | 0.914%                                   |  |
| 184 | 11.581 | 11.549 | 11.642 | VV | 406317 | 7597150 | 94.83%  | 1.986%                                   |  |
| 185 | 11.671 | 11.642 | 11.714 | VV | 165828 | 4123764 | 51.47%  | 1.078%                                   |  |
| 186 | 11.734 | 11.714 | 11.754 | VV | 64109  | 1434305 | 17.90%  | 0.375%                                   |  |
| 187 | 11.775 | 11.754 | 11.796 | VV | 63695  | 1503448 | 18.77%  | 0.393%                                   |  |
| 188 | 11.873 | 11.796 | 11.919 | VV | 80985  | 4899795 | 61.16%  | 1.281%                                   |  |
| 189 | 11.939 | 11.919 | 11.952 | VV | 65472  | 1216270 | 15.18%  | 0.318%                                   |  |
| 190 | 11.974 | 11.952 | 11.996 | VV | 86498  | 1907995 | 23.82%  | 0.499%                                   |  |
| 191 | 12.015 | 11.996 | 12.044 | VV | 81225  | 1928590 | 24.07%  | 0.504%                                   |  |
| 192 | 12.064 | 12.044 | 12.113 | VV | 73302  | 2522272 | 31.48%  | 0.659%                                   |  |
| 193 | 12.133 | 12.113 | 12.167 | VV | 58587  | 1808319 | 22.57%  | 0.473%                                   |  |
| 194 | 12.186 | 12.167 | 12.203 | VV | 56237  | 1150647 | 14.36%  | 0.301%                                   |  |

|     |        |        |        |    |        |         | Instrument :<br>FID_G                   |        |
|-----|--------|--------|--------|----|--------|---------|---|--------|
|     |        |        |        |    |        |         | ClientSampleId :<br>HW0425-PT-DIES-SOIL |        |
| 195 | 12.252 | 12.203 | 12.279 | VV | 306017 | 5768100 | 72.00%                                  | 1.508% |
| 196 | 12.304 | 12.279 | 12.349 | VV | 140184 | 3303676 | 41.00%                                  | 0.244% |
| 197 | 12.362 | 12.349 | 12.421 | VV | 54923  | 2177455 | 27.00%                                  | 0.311% |
| 198 | 12.449 | 12.421 | 12.472 | VV | 49946  | 1404284 | 17.00%                                  | 0.400% |
| 199 | 12.478 | 12.472 | 12.491 | VV | 46255  | 513079  | 6.00%                                   | 0.634% |
| 200 | 12.511 | 12.491 | 12.576 | VV | 66340  | 2841797 | 35.00%                                  | 0.513% |
| 201 | 12.589 | 12.576 | 12.609 | VV | 48782  | 933483  | 11.65%                                  | 0.244% |
| 202 | 12.635 | 12.609 | 12.647 | VV | 55721  | 1188905 | 14.84%                                  | 0.311% |
| 203 | 12.664 | 12.647 | 12.697 | VV | 65073  | 1531004 | 19.11%                                  | 0.400% |
| 204 | 12.717 | 12.697 | 12.789 | VV | 51898  | 2424044 | 30.26%                                  | 0.634% |
| 205 | 12.818 | 12.789 | 12.865 | VV | 48321  | 1961861 | 24.49%                                  | 0.513% |
| 206 | 12.894 | 12.865 | 12.937 | VV | 241163 | 4106579 | 51.26%                                  | 1.074% |
| 207 | 12.956 | 12.937 | 13.002 | VV | 48948  | 1643778 | 20.52%                                  | 0.430% |
| 208 | 13.006 | 13.002 | 13.021 | VV | 36184  | 389455  | 4.86%                                   | 0.102% |
| 209 | 13.035 | 13.021 | 13.087 | VV | 37360  | 1321581 | 16.50%                                  | 0.346% |
| 210 | 13.098 | 13.087 | 13.103 | VV | 30988  | 289738  | 3.62%                                   | 0.076% |
| 211 | 13.110 | 13.103 | 13.126 | VV | 31385  | 424060  | 5.29%                                   | 0.111% |
| 212 | 13.145 | 13.126 | 13.161 | VV | 37735  | 731580  | 9.13%                                   | 0.191% |
| 213 | 13.165 | 13.161 | 13.173 | VV | 35325  | 246961  | 3.08%                                   | 0.065% |
| 214 | 13.181 | 13.173 | 13.201 | VV | 35463  | 557588  | 6.96%                                   | 0.146% |
| 215 | 13.216 | 13.201 | 13.237 | VV | 32800  | 663792  | 8.29%                                   | 0.174% |
| 216 | 13.255 | 13.237 | 13.272 | VV | 34857  | 676243  | 8.44%                                   | 0.177% |
| 217 | 13.327 | 13.272 | 13.362 | VV | 410707 | 7330751 | 91.50%                                  | 1.917% |
| 218 | 13.384 | 13.362 | 13.407 | VV | 314021 | 4202427 | 52.45%                                  | 1.099% |
| 219 | 13.415 | 13.407 | 13.479 | VV | 45217  | 1326773 | 16.56%                                  | 0.347% |
| 220 | 13.507 | 13.479 | 13.535 | VV | 147103 | 2223507 | 27.75%                                  | 0.581% |
| 221 | 13.562 | 13.535 | 13.631 | VV | 63239  | 1907085 | 23.80%                                  | 0.499% |
| 222 | 13.637 | 13.631 | 13.657 | VV | 22443  | 338658  | 4.23%                                   | 0.089% |
| 223 | 13.669 | 13.657 | 13.700 | VV | 22092  | 522663  | 6.52%                                   | 0.137% |
| 224 | 13.736 | 13.700 | 13.765 | VV | 29155  | 955776  | 11.93%                                  | 0.250% |
| 225 | 13.784 | 13.765 | 13.802 | VV | 23625  | 479866  | 5.99%                                   | 0.125% |
| 226 | 13.815 | 13.802 | 13.837 | VV | 21301  | 422650  | 5.28%                                   | 0.111% |
| 227 | 13.853 | 13.837 | 13.871 | VV | 21368  | 397228  | 4.96%                                   | 0.104% |
| 228 | 13.887 | 13.871 | 13.909 | VV | 23861  | 481992  | 6.02%                                   | 0.126% |
| 229 | 13.931 | 13.909 | 13.969 | VV | 24715  | 727546  | 9.08%                                   | 0.190% |
| 230 | 14.003 | 13.969 | 14.031 | VV | 19090  | 647266  | 8.08%                                   | 0.169% |
| 231 | 14.040 | 14.031 | 14.064 | VV | 17313  | 322084  | 4.02%                                   | 0.084% |
| 232 | 14.094 | 14.064 | 14.133 | VV | 90771  | 1516012 | 18.92%                                  | 0.396% |
| 233 | 14.149 | 14.133 | 14.166 | VV | 17238  | 324201  | 4.05%                                   | 0.085% |
| 234 | 14.179 | 14.166 | 14.195 | VV | 16616  | 267652  | 3.34%                                   | 0.070% |
| 235 | 14.214 | 14.195 | 14.285 | VV | 17863  | 737653  | 9.21%                                   | 0.193% |
| 236 | 14.323 | 14.285 | 14.351 | VV | 17638  | 571864  | 7.14%                                   | 0.150% |
| 237 | 14.356 | 14.351 | 14.361 | VV | 12383  | 72764   | 0.91%                                   | 0.019% |
| 238 | 14.365 | 14.361 | 14.375 | VV | 12499  | 104654  | 1.31%                                   | 0.027% |
| 239 | 14.383 | 14.375 | 14.391 | VV | 12784  | 118155  | 1.47%                                   | 0.031% |
| 240 | 14.394 | 14.391 | 14.411 | VV | 13007  | 145972  | 1.82%                                   | 0.038% |
| 241 | 14.423 | 14.411 | 14.437 | VV | 12060  | 179934  | 2.25%                                   | 0.047% |
| 242 | 14.458 | 14.437 | 14.472 | VV | 14219  | 274588  | 3.43%                                   | 0.072% |
| 243 | 14.499 | 14.472 | 14.542 | VV | 19981  | 659283  | 8.23%                                   | 0.172% |
| 244 | 14.549 | 14.542 | 14.584 | VV | 12687  | 286298  | 3.57%                                   | 0.075% |
| 245 | 14.595 | 14.584 | 14.627 | VV | 11296  | 260796  | 3.26%                                   | 0.068% |
| 246 | 14.658 | 14.627 | 14.692 | VV | 46973  | 820181  | 10.24%                                  | 0.214% |

Instrument :  
FID\_G  
ClientSampleId :  
HW0425-PT-DIES-SOIL

**Manual Integrations APPROVED**

Reviewed By :Yogesh Patel 05/14/2025  
Supervised By :mohammad ahmed 05/15/2025

| rteres |        |        |        |    |       |         |        |        |  |
|--------|--------|--------|--------|----|-------|---------|--------|--------|--|
| 247    | 14.718 | 14.692 | 14.742 | VV | 15091 | 351414  | 4.39%  | 0.092% |  |
| 248    | 14.759 | 14.742 | 14.826 | VV | 11823 | 482882  |        |        |  |
| 249    | 14.832 | 14.826 | 14.838 | VV | 7743  | 57995   |        |        |  |
| 250    | 14.864 | 14.838 | 14.872 | VV | 9511  | 175074  |        |        |  |
| 251    | 14.888 | 14.872 | 14.927 | VV | 9951  | 296044  |        |        |  |
| 252    | 14.937 | 14.927 | 14.962 | VV | 9179  | 169011  |        |        |  |
| 253    | 14.996 | 14.962 | 15.030 | VV | 86456 | 1412562 | 17.63% | 0.369% |  |
| 254    | 15.052 | 15.030 | 15.074 | VV | 9062  | 213085  | 2.66%  | 0.056% |  |
| 255    | 15.083 | 15.074 | 15.122 | VV | 7234  | 184959  | 2.31%  | 0.048% |  |
| 256    | 15.128 | 15.122 | 15.145 | VV | 6229  | 77969   | 0.97%  | 0.020% |  |
| 257    | 15.153 | 15.145 | 15.158 | VV | 6003  | 46047   | 0.57%  | 0.012% |  |
| 258    | 15.163 | 15.158 | 15.169 | VV | 6019  | 37902   | 0.47%  | 0.010% |  |
| 259    | 15.199 | 15.169 | 15.230 | VV | 26939 | 471578  | 5.89%  | 0.123% |  |
| 260    | 15.250 | 15.230 | 15.286 | VV | 7491  | 218215  | 2.72%  | 0.057% |  |
| 261    | 15.292 | 15.286 | 15.327 | VV | 5832  | 129327  | 1.61%  | 0.034% |  |
| 262    | 15.333 | 15.327 | 15.369 | VV | 5502  | 122239  | 1.53%  | 0.032% |  |
| 263    | 15.394 | 15.369 | 15.420 | VV | 5714  | 152513  | 1.90%  | 0.040% |  |
| 264    | 15.443 | 15.420 | 15.508 | VV | 6191  | 264478  | 3.30%  | 0.069% |  |
| 265    | 15.515 | 15.508 | 15.522 | VV | 4800  | 39682   | 0.50%  | 0.010% |  |
| 266    | 15.537 | 15.522 | 15.556 | VV | 5168  | 91585   | 1.14%  | 0.024% |  |
| 267    | 15.585 | 15.556 | 15.659 | VV | 42040 | 1014515 | 12.66% | 0.265% |  |
| 268    | 15.664 | 15.659 | 15.668 | VV | 4404  | 23601   | 0.29%  | 0.006% |  |
| 269    | 15.670 | 15.668 | 15.692 | VV | 4487  | 60669   | 0.76%  | 0.016% |  |
| 270    | 15.721 | 15.692 | 15.759 | VV | 14371 | 322136  | 4.02%  | 0.084% |  |
| 271    | 15.781 | 15.759 | 15.831 | VV | 9003  | 223768  | 2.79%  | 0.059% |  |
| 272    | 15.849 | 15.831 | 15.877 | VV | 3431  | 84504   | 1.05%  | 0.022% |  |
| 273    | 15.888 | 15.877 | 15.899 | VV | 2874  | 35304   | 0.44%  | 0.009% |  |
| 274    | 15.906 | 15.899 | 15.921 | VV | 3146  | 38861   | 0.49%  | 0.010% |  |
| 275    | 15.930 | 15.921 | 15.934 | VV | 2873  | 21206   | 0.26%  | 0.006% |  |
| 276    | 15.942 | 15.934 | 15.967 | VV | 3066  | 55670   | 0.69%  | 0.015% |  |
| 277    | 15.983 | 15.967 | 16.000 | VV | 3235  | 55891   | 0.70%  | 0.015% |  |
| 278    | 16.043 | 16.000 | 16.066 | VV | 3876  | 122936  | 1.53%  | 0.032% |  |
| 279    | 16.074 | 16.066 | 16.080 | VV | 2625  | 22400   | 0.28%  | 0.006% |  |
| 280    | 16.110 | 16.080 | 16.134 | VV | 3952  | 100611  | 1.26%  | 0.026% |  |
| 281    | 16.139 | 16.134 | 16.158 | VV | 2662  | 33176   | 0.41%  | 0.009% |  |
| 282    | 16.181 | 16.158 | 16.201 | VV | 2718  | 61669   | 0.77%  | 0.016% |  |
| 283    | 16.224 | 16.201 | 16.264 | VV | 7122  | 144591  | 1.80%  | 0.038% |  |
| 284    | 16.287 | 16.264 | 16.336 | VV | 3735  | 96571   | 1.21%  | 0.025% |  |
| 285    | 16.348 | 16.336 | 16.352 | VV | 1617  | 14341   | 0.18%  | 0.004% |  |
| 286    | 16.357 | 16.352 | 16.380 | VV | 1779  | 24099   | 0.30%  | 0.006% |  |
| 287    | 16.404 | 16.380 | 16.448 | VV | 2173  | 68489   | 0.85%  | 0.018% |  |
| 288    | 16.457 | 16.448 | 16.469 | VV | 1710  | 15929   | 0.20%  | 0.004% |  |
| 289    | 16.484 | 16.469 | 16.503 | VV | 1360  | 24386   | 0.30%  | 0.006% |  |
| 290    | 16.531 | 16.503 | 16.556 | VV | 2100  | 50880   | 0.64%  | 0.013% |  |
| 291    | 16.607 | 16.556 | 16.647 | VV | 9570  | 221743  | 2.77%  | 0.058% |  |
| 292    | 16.656 | 16.647 | 16.661 | VV | 1566  | 11996   | 0.15%  | 0.003% |  |
| 293    | 16.708 | 16.661 | 16.736 | VV | 8392  | 148436  | 1.85%  | 0.039% |  |
| 294    | 16.789 | 16.736 | 16.821 | VV | 7254  | 174717  | 2.18%  | 0.046% |  |
| 295    | 16.850 | 16.821 | 16.884 | VV | 2304  | 49384   | 0.62%  | 0.013% |  |
| 296    | 16.888 | 16.884 | 16.894 | VV | 707   | 4003    | 0.05%  | 0.001% |  |
| 297    | 16.906 | 16.894 | 16.930 | VV | 974   | 15824   | 0.20%  | 0.004% |  |
| 298    | 16.934 | 16.930 | 16.963 | VV | 657   | 7521    | 0.09%  | 0.002% |  |
| 299    | 16.981 | 16.963 | 16.993 | VV | 762   | 9046    | 0.11%  | 0.002% |  |

Instrument :  
 FID\_G  
 ClientSampleId :  
 HW0425-PT-DIES-SOIL  
 4.39% 0.092%

**Manual Integrations APPROVED**

Reviewed By :Yogesh Patel 05/14/2025  
 Supervised By :mohammad ahmed 05/15/2025

|     |        |        |        |    | rteres |        |
|-----|--------|--------|--------|----|--------|--------|
| 300 | 17.005 | 16.993 | 17.025 | VV | 1078   | 14092  |
| 301 | 17.058 | 17.025 | 17.062 | VV | 845    | 12561  |
| 302 | 17.091 | 17.062 | 17.113 | VV | 1506   | 28075  |
| 303 | 17.176 | 17.113 | 17.201 | VV | 4925   | 105204 |
| 304 | 17.223 | 17.201 | 17.237 | VV | 11938  | 162677 |
| 305 | 17.253 | 17.237 | 17.285 | VV | 19350  | 263277 |

Instrument :  
 FID\_G  
 ClientSampleId :  
 HW0425-PT-DIES-SOIL  
 0.18% 0.004%

**Manual IntegrationsAPPROVED**

Reviewed By :Yogesh Patel 05/14/2025  
 Supervised By :mohammad ahmed 05/15/2025

Sum of corrected areas: 382485071

FG042425.M Wed May 14 05:19:22 2025

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- 3
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# Packing List

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Golden, CO 80403

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

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| Date       | Order # |
| 04/21/2025 | 333293  |



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Alliance Tech Group - Newark  
ATTN: Sohil Jodhani  
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| PO2-1668      | Net 30 | ZCM-100   | 1500470    | FedEx Collect 2nd Day | Golden, CO |

| Qty Ordered | Qty Shipped | Qty Backorder | Part Number      | Part Description            | Study Number | Lot Number |
|-------------|-------------|---------------|------------------|-----------------------------|--------------|------------|
| 1           | 1           | 0             | PT-MET-SOIL      | SOIL/HW Trace Metals        | HW0425       | 7100-04    |
| 1           | 1           | 0             | PT-CR6-SOIL      | SOIL/HW Hexavalent Chromium | HW0425       | 7100-05B   |
| 1           | 1           | 0             | PT-CN-SOIL       | SOIL/HW Cyanide             | HW0425       | 7100-06    |
| 1           | 1           | 0             | PT-CORR-SOIL     | SOIL/HW Corrosivity/pH      | HW0425       | 7100-11    |
| 1           | 1           | 0             | PT-FP-SOIL       | SOIL/HW Flash Point         | HW0425       | 7100-10    |
| 1           | 1           | 0             | PT-AN-SOIL       | SOIL/HW Anions              | HW0425       | 7100-08    |
| 1           | 1           | 0             | PT-NUT-SOIL      | SOIL/HW Nutrients           | HW0425       | 7100-09B   |
| 1           | 1           | 0             | PT-SOL-SOIL      | SOIL/HW Solids              | HW0425       | 7100-31    |
| 1           | 1           | 0             | PT-NO2-SOIL      | SOIL/HW Nitrite as N        | HW0425       | 7100-71    |
| 1           | 1           | 0             | PT-GAS-SOIL      | SOIL/HW Gasoline            | HW0425       | 7100-96    |
| 1           | 1           | 0             | PT-OGR-SOIL      | SOIL/HW Oil and Grease      | HW0425       | 7100-94    |
| 1           | 1           | 0             | PT-VOA-SOIL      | SOIL/HW Volatiles           | HW0425       | 7100-12    |
| 1           | 1           | 0             | PT-BNA-SOIL      | SOIL/HW BNAs                | HW0425       | 7100-13    |
| 1           | 1           | 0             | PT-PEST-SOIL     | SOIL/HW Pesticides          | HW0425       | 7100-14    |
| 1           | 1           | 0             | PT-CHLR-SOIL     | SOIL/HW Chlordane           | HW0425       | 7100-15    |
| 1           | 1           | 0             | PT-TXP-SOIL      | SOIL/HW Toxaphene           | HW0425       | 7100-16    |
| 1           | 1           | 0             | PT-PCB-SOIL      | SOIL/HW PCBs                | HW0425       | 7100-17    |
| 1           | 1           | 0             | PT-PCBO-SOIL     | SOIL/HW PCBs in Oil         | HW0425       | 7100-88    |
| 1           | 1           | 0             | PT-HERB-SOIL     | SOIL/HW Herbicides          | HW0425       | 7100-18    |
| 1           | 1           | 0             | PT-PAH-SOIL      | SOIL/HW PAHs                | HW0425       | 7100-22    |
| 1           | 1           | 0             | PT-TRIAZINE-SOIL | SOIL/HW Triazine Pesticides | HW0425       | 7100-106   |
| 1           | 1           | 0             | PT-NJEPH-SOIL    | NJ EPH in SOIL              | HW0425       | 7100-105   |

# Packing List

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Golden, CO 80403

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**Ship To**  
Alliance Tech Group - Newark  
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284 Sheffield St., #1  
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USA  
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|---------------|--------|-----------|------------|----------------|------------|
| CPR           | Net 30 | ZCM-100   | 1500470    | FedEx Next Day | Golden, CO |

| Qty Ordered | Qty Shipped | Qty Backorder | Part Number  | Part Description       | Study Number | Lot Number |
|-------------|-------------|---------------|--------------|------------------------|--------------|------------|
| 1           | 1           | 0             | PT-DIES-SOIL | SOIL/HW Diesel in Soil | HW0425       | 7100-100   |

**Laboratory Certification**

| Certified By         | License No.      |
|----------------------|------------------|
| CAS EPA CLP Contract | 68HERH20D0011    |
| Connecticut          | PH-0830          |
| DOD ELAP (ANAB)      | L2219            |
| Maine                | 2024021          |
| Maryland             | 296              |
| New Hampshire        | 255424 Rev 1     |
| New Jersey           | 20012            |
| New York             | 11376            |
| Pennsylvania         | 68-00548         |
| Soil Permit          | 525-24-234-08441 |
| Texas                | T104704488       |

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