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# DATA PACKAGE

## GC SEMI-VOLATILES

**PROJECT NAME : RFP 905**

**WESTON SOLUTIONS, INC.**

**1090 King Georges Post Road**

**Suite 201**

**Edison, NJ - 08837-3703**

**Phone No: 732-585-4410**

**ORDER ID : Q1421**

**ATTENTION : Smita Sumbaly**

**Laboratory Certification ID # 20012**

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# Cover Page

**Order ID :** Q1421

**Project ID :** RFP 905

**Client :** Weston Solutions, Inc.

| Lab Sample Number | Client Sample Number |
|---|---|
| Q1421-01 | P001-CLAY-CF01-01 |
| Q1421-02 | P001-CLAY-CF01-01MS |
| Q1421-03 | P001-CLAY-CF01-01MSD |
| Q1421-04 | P001-CLAY-CF01-01 |
| Q1421-05 | P001-CLAY-CF01-01MS |
| Q1421-06 | P001-CLAY-CF01-01MSD |
| Q1421-07 | P001-CLAY-CF01-02 |
| Q1421-08 | P001-CLAY-CF01-02 |
| Q1421-09 | P001-CLAY-CF02-01 |
| Q1421-10 | P001-CLAY-CF02-01 |

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

Signature : _____

Date: 3/10/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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# CASE NARRATIVE

**Weston Solutions, Inc.**
**Project Name: RFP 905**
**Project # N/A**
**Chemtech Project # Q1421**
**Test Name: EPH**

**A. Number of Samples and Date of Receipt:**
10 Solid samples were received on 02/24/2025.

**B. Parameters**
According to the Chain of Custody document, the following analyses were requested: Cyanide, EPH, Mercury, Metals ICP-TAL, METALS TAL+CN, PCB, Pesticide-TCL, SPLP BNA, SPLP Cyanide, SPLP Extraction, SPLP ICP Metals, SPLP Mercury, SPLP PCB, SPLP Pesticide, SPLP VOA, SPLP ZHE Ext, SVOC-TCL BNA -20 and VOC-TCLVOA-10. This data package contains results for EPH.

**C. Analytical Techniques:**
The analysis were performed on instrument FID_C. The column is RXI-1MS which is 20 meters, 0.18mm ID, 0.18 um df, catalog 10224.The analyses were performed on instrument FID_D. The column is RXI-1MS which is 20 meters, 0.18mm ID, 0.18 um df, catalog 10224.The analysis of EPHs was based on method NJEPH 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 {Q1421-02} with File ID: FD049142.D recoveries met the requirements for all compounds except for Aromatic C21-C36[151%] due to matrix interference.

The MSD {Q1421-03} with File ID: FD049143.D recoveries met the acceptable requirements except for Aromatic C21-C36[146%] due to matrix interference.

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

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

**F. Calculation for Concentration in Water Samples:**

$$C\ (ug/L) = \frac{(A)\ (D)\ (Ve)}{CF\ (Vs)}$$

Where:
C = Concentration of each compound or hydrocarbon range, ug/L
A = Area response of each compound or carbon range to be measured
D = Dilution Factor
Vs = Volume of sample extracted, mL
Ve = Final volume of extract, uL
CF = Calibration factor of each compound or carbon range for each fraction

**G. Calculation for Concentration in Soil Samples:**

$$C\ (ug/g) = \frac{(A)\ (D)\ (Ve)}{CF\ (S)}$$

Where:
C = Concentration of each compound or hydrocarbon range, ug/g (dry weight basis)
A = Area response of each compound or carbon range to be measured
D = Dilution Factor
Ve = Final volume of extract, uL
CF = Calibration factor of each compound or carbon range for each fraction
S = Dry sample weight, mg

Total EPH concentration = Total of 4 Aromatic Carbon Ranges and 4 Aliphatic Carbon Ranges.

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

---

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

Signature_____

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# DATA REPORTING QUALIFIERS- ORGANIC

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

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

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## GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: Q1421 MATRIX: Solid

METHOD: NJEPH/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 {Q1421-02} with File ID: FD049142.D recoveries met the requirements for all compounds except for Aromatic C21-C36[151%] due to matrix interference.<br><br>The MSD {Q1421-03} with File ID: FD049143.D recoveries met the acceptable requirements except for Aromatic C21-C36[146%] due to matrix interference.<br><br>The Blank Spike met requirements for all samples .<br>The Blank Spike Duplicate 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.

ADDITIONAL COMMENTS:

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

_____ _____

QA REVIEW Date

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## APPENDIX A

## QA REVIEW GENERAL DOCUMENTATION

**Project #:** Q1421

| | Completed |
|---|---|
| **For thorough review, the report must have the following:** | |
| **GENERAL:** | |
| **Are all original paperwork present (chain of custody, record of communication,airbill, sample management lab chronicle, login page)** | ✓ |
| **Check chain-of-custody for proper relinquish/return of samples** | ✓ |
| **Is the chain of custody signed and complete** | ✓ |
| **Check internal chain-of-custody for proper relinquish/return of samples /sample extracts** | ✓ |
| **Collect information for each project id from server. Were all requirements followed** | ✓ |
| **COVER PAGE:** | |
| **Do numbers of samples correspond to the number of samples in the Chain of Custody on login page** | ✓ |
| **Do lab numbers and client Ids on cover page agree with the Chain of Custody** | ✓ |
| **CHAIN OF CUSTODY:** | |
| **Do requested analyses on Chain of Custody agree with form I results** | ✓ |
| **Do requested analyses on Chain of Custody agree with the log-in page** | ✓ |
| **Were the correct method log-in for analysis according to the Analytical Request and Chain of Castody** | ✓ |
| **Were the samples received within hold time** | ✓ |
| **Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle** | ✓ |
| **ANALYTICAL:** | |
| **Was method requirement followed?** | ✓ |
| **Was client requirement followed?** | ✓ |
| **Does the case narrative summarize all QC failure?** | ✓ |
| **All runlogs and manual integration are reviewed for requirements** | ✓ |
| **All manual calculations and /or hand notations verified** | ✓ |

**QA Review Signature:** SOHIL JODHANI **Date:** 03/10/2025

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# LAB CHRONICLE

| | | | |
|---|---|---|---|
| **OrderID:** | Q1421 | **OrderDate:** | 2/24/2025 2:56:42 PM |
| **Client:** | Weston Solutions, Inc. | **Project:** | RFP 905 |
| **Contact:** | Smita Sumbaly | **Location:** | H31,VOA Ref. #2 Soil |

| LabID | ClientID | Matrix | Test | Method | Sample Date | Prep Date | Anal Date | Received |
|---|---|---|---|---|---|---|---|---|
| **Q1421-01** | **P001-CLAY-CF01-01** | **SOIL** | | | **02/24/25** | | | **02/24/25** |
| | | | PCB | 8082A | | 02/25/25 | 02/25/25 | |
| | | | Pesticide-TCL | 8081B | | 02/25/25 | 02/25/25 | |
| | | | EPH | NJEPH | | 02/27/25 | 02/28/25 | |
| **Q1421-04** | **P001-CLAY-CF01-01** | **WATER** | | | **02/24/25** | | | **02/24/25** |
| | | | SPLP PCB | 8082A | | 02/27/25 | 02/27/25 | |
| | | | SPLP Pesticide | 8081B | | 02/27/25 | 02/27/25 | |
| | | | EPH | NJEPH | | 02/26/25 | 02/27/25 | |
| **Q1421-07** | **P001-CLAY-CF01-02** | **SOIL** | | | **02/24/25** | | | **02/24/25** |
| | | | PCB | 8082A | | 02/25/25 | 02/25/25 | |
| | | | Pesticide-TCL | 8081B | | 02/25/25 | 02/25/25 | |
| | | | EPH | NJEPH | | 02/27/25 | 02/28/25 | |
| **Q1421-08** | **P001-CLAY-CF01-02** | **WATER** | | | **02/24/25** | | | **02/24/25** |
| | | | SPLP PCB | 8082A | | 02/27/25 | 02/27/25 | |
| | | | SPLP Pesticide | 8081B | | 02/27/25 | 02/27/25 | |
| | | | EPH | NJEPH | | 02/26/25 | 02/27/25 | |
| **Q1421-08RE** | **P001-CLAY-CF01-02RE** | **WATER** | | | **02/24/25** | | | **02/24/25** |
| | | | SPLP Pesticide | 8081B | | 02/27/25 | 02/28/25 | |
| **Q1421-09** | **P001-CLAY-CF02-01** | **SOIL** | | | **02/24/25** | | | **02/24/25** |
| | | | PCB | 8082A | | 02/25/25 | 02/25/25 | |
| | | | Pesticide-TCL | 8081B | | 02/25/25 | 02/25/25 | |
| | | | EPH | NJEPH | | 02/27/25 | 02/28/25 | |

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# LAB CHRONICLE

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Q1421-10** | **P001-CLAY-CF02-01** | **Water** | | | **02/24/25** | | **02/24/25** |
| | | | EPH | NJEPH | | 02/26/25 | 02/27/25 |
| | | | SPLP PCB | 8082A | | 02/27/25 | 02/27/25 |
| | | | SPLP Pesticide | 8081B | | 02/27/25 | 02/27/25 |

# QC SUMMARY

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## SOIL EPH SURROGATE RECOVERY

Lab Name: CHEMTECH Contract: ROYF02

Lab Code: CHEM CASE No.: Q1421 SAS No.: Q1421 SDG No.: Q1421

Run Number: FC022725AL

| Client SAMPLE NO. | 1-chlorooctadecane (SURR) | | | TOT OUT |
|---|---|---|---|---|
| PB166883BL | 64 | | | 0 |
| PB166883BS | 81 | | | 0 |
| PB166883TB | 65 | | | 0 |
| P001-CLAY-CF01-01 | 67 | | | 0 |
| P001-CLAY-CF01-01MS | 69 | | | 0 |
| P001-CLAY-CF01-01MSD | 71 | | | 0 |
| P001-CLAY-CF01-02 | 66 | | | 0 |
| P001-CLAY-CF02-01 | 62 | | | 0 |

| | QC LIMITS |
|---|---|
| 1-chlorooctadecane (SURR) | (40-140) |

# Column to be used to flag recovery values
* Values outside of contract required QC Limits
D Surrogate diluted out

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## SOIL EPH SURROGATE RECOVERY

Lab Name: CHEMTECH Contract: ROYF02

Lab Code: CHEM CASE No.: Q1421 SAS No.: Q1421 SDG No.: Q1421

Run Number: FC022825AL

| Client SAMPLE NO. | 1-chlorooctadecane (SURR) | | | TOT OUT |
|---|---|---|---|---|
| PB166923BL | 83 | | | 0 |
| PB166923BS | 78 | | | 0 |
| PB166923BSD | 77 | | | 0 |
| P001-CLAY-CF01-01 | 105 | | | 0 |
| P001-CLAY-CF01-01MS | 61 | | | 0 |
| P001-CLAY-CF01-01MSD | 65 | | | 0 |
| P001-CLAY-CF01-02 | 97 | | | 0 |
| P001-CLAY-CF02-01 | 61 | | | 0 |

| | QC LIMITS |
|---|---|
| 1-chlorooctadecane (SURR) | (40-140) |

# Column to be used to flag recovery values
* Values outside of contract required QC Limits
D Surrogate diluted out

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## SOIL EPH SURROGATE RECOVERY

Lab Name: CHEMTECH Contract: ROYF02

Lab Code: CHEM CASE No.: Q1421 SAS No.: Q1421 SDG No.: Q1421

Run Number: FD022725AR

| Client SAMPLE NO. | 2-Bromonaphthalene (SURR) | 2-Flurobiphenyl (SURR) | ortho-Terphenyl (SURR) | TOT OUT |
|---|---|---|---|---|
| PB166883BL | 111 | 112 | 98 | 0 |
| PB166883BS | 123 | 131 | 111 | 0 |
| PB166883TB | 127 | 126 | 112 | 0 |
| P001-CLAY-CF01-01 | 120 | 124 | 108 | 0 |
| P001-CLAY-CF01-01MS | 106 | 107 | 91 | 0 |
| P001-CLAY-CF01-01MSD | 106 | 107 | 91 | 0 |
| P001-CLAY-CF01-02 | 108 | 112 | 97 | 0 |
| P001-CLAY-CF02-01 | 106 | 108 | 92 | 0 |

| | QC LIMITS |
|---|---|
| 2-Bromonaphthalene (SURR) | (40-140) |
| 2-Flurobiphenyl (SURR) | (40-140) |
| ortho-Terphenyl (SURR) | (40-140) |

# Column to be used to flag recovery values
* Values outside of contract required QC Limits
D Surrogate diluted out

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## SOIL EPH SURROGATE RECOVERY

Lab Name: CHEMTECH Contract: ROYF02

Lab Code: CHEM CASE No.: Q1421 SAS No.: Q1421 SDG No.: Q1421

Run Number: FD022825AR

| Client SAMPLE NO. | 2-Bromonaphthalene (SURR) | 2-Flurobiphenyl (SURR) | ortho-Terphenyl (SURR) | TOT OUT |
|---|---|---|---|---|
| PB166923BL | 112 | 116 | 99 | 0 |
| PB166923BS | 117 | 124 | 106 | 0 |
| PB166923BSD | 118 | 126 | 107 | 0 |
| P001-CLAY-CF01-01 | 132 | 139 | 81 | 0 |
| P001-CLAY-CF01-01MS | 118 | 124 | 67 | 0 |
| P001-CLAY-CF01-01MSD | 112 | 118 | 64 | 0 |
| P001-CLAY-CF01-02 | 129 | 133 | 103 | 0 |
| P001-CLAY-CF02-01 | 100 | 105 | 48 | 0 |

| | QC LIMITS |
|---|---|
| 2-Bromonaphthalene (SURR) | (40-140) |
| 2-Flurobiphenyl (SURR) | (40-140) |
| ortho-Terphenyl (SURR) | (40-140) |

# Column to be used to flag recovery values
* Values outside of contract required QC Limits
D Surrogate diluted out

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## WATER EPH MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

**Lab Name:** Chemtech **Client:** Weston Solutions, Inc.

**Lab Code:** CHEM **Cas No:** Q1421 **SAS No :** Q1421 **SDG No:** Q1421

**Sample No :** Q1421-05 **Datafile:** FC068312.D

**Client ID :** P001-CLAY-CF01-01MS

| COMPOUND | SPIKE ADDED ug/l | SAMPLE CONCENTRATION ug/l | MS/MSD CONCENTRATION ug/l | % REC | Qual | QC LIMITS |
|---|---|---|---|---|---|---|
| Aliphatic C9-C12 | 300 | 0 | 201 | 67 | | (40-140) |
| Aliphatic C12-C16 | 200 | 8.76 | 158 | 75 | | (40-140) |
| Aliphatic C16-C21 | 300 | 0 | 238 | 79 | | (40-140) |
| Aliphatic C21-C28 | 400 | 0 | 320 | 80 | | (40-140) |
| Aliphatic C28-C40 | 600 | 60.6 | 531 | 78 | | (40-140) |

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## WATER EPH MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

**Lab Name:** Chemtech **Client:** Weston Solutions, Inc.

**Lab Code:** CHEM **Cas No:** Q1421 **SAS No :** Q1421 **SDG No:** Q1421

**Sample No :** Q1421-06 **Datafile:** FC068313.D

**Client ID :** P001-CLAY-CF01-01MSD

| COMPOUND | SPIKE ADDED ug/l | SAMPLE CONCENTRATION ug/l | MS/MSD CONCENTRATION ug/l | % REC | Qual | RPD \| | QC LIMITS | QC Limit Of RPD |
|---|---|---|---|---|---|---|---|---|
| Aliphatic C9-C12 | 300 | 0 | 203 | 68 | | 1.04 \| | (40-140) | 25 |
| Aliphatic C12-C16 | 200 | 8.76 | 160 | 76 | | 1.33 \| | (40-140) | 25 |
| Aliphatic C16-C21 | 300 | 0 | 241 | 80 | | 1.25 \| | (40-140) | 25 |
| Aliphatic C21-C28 | 400 | 0 | 321 | 80 | | 0.25 \| | (40-140) | 25 |
| Aliphatic C28-C40 | 600 | 60.6 | 538 | 80 | | 1.52 \| | (40-140) | 25 |

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## SOLID EPH MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

**Lab Name:** Chemtech **Client:** Weston Solutions, Inc.

**Lab Code:** CHEM **Cas No:** Q1421 **SAS No :** Q1421 **SDG No:** Q1421

**Sample No :** Q1421-02 **Datafile:** FC068334.D

**Client ID :** P001-CLAY-CF01-01MS

| COMPOUND | SPIKE ADDED mg/kg | SAMPLE CONCENTRATION mg/kg | MS/MSD CONCENTRATION mg/kg | % REC | Qual | QC LIMITS |
|---|---|---|---|---|---|---|
| Aliphatic C9-C12 | 14.2 | 0 | 9.70 | 68 | | (40-140) |
| Aliphatic C12-C16 | 9.5 | 0.50 | 9.05 | 90 | | (40-140) |
| Aliphatic C16-C21 | 14.2 | 0.43 | 14.6 | 100 | | (40-140) |
| Aliphatic C21-C28 | 18.9 | 0 | 19.4 | 102 | | (40-140) |
| Aliphatic C28-C40 | 28.4 | 2.80 | 34.1 | 110 | | (40-140) |

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## SOLID EPH MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

**Lab Name:** Chemtech **Client:** Weston Solutions, Inc.

**Lab Code:** CHEM **Cas No:** Q1421 **SAS No :** Q1421 **SDG No:** Q1421

**Sample No :** Q1421-03 **Datafile:** FC068335.D

**Client ID :** P001-CLAY-CF01-01MSD

| COMPOUND | SPIKE ADDED mg/kg | SAMPLE CONCENTRATION mg/kg | MS/MSD CONCENTRATION mg/kg | % REC | Qual | RPD \| | QC LIMITS | QC Limit Of RPD |
|---|---|---|---|---|---|---|---|---|
| Aliphatic C9-C12 | 14.2 | 0 | 9.71 | 68 | | 0.15 \| | (40-140) | 25 |
| Aliphatic C12-C16 | 9.5 | 0.50 | 9.10 | 91 | | 0.44 \| | (40-140) | 25 |
| Aliphatic C16-C21 | 14.2 | 0.43 | 14.7 | 100 | | 0.1 \| | (40-140) | 25 |
| Aliphatic C21-C28 | 18.9 | 0 | 19.6 | 103 | | 0.98 \| | (40-140) | 25 |
| Aliphatic C28-C40 | 28.4 | 2.80 | 34.6 | 111 | | 0.9 \| | (40-140) | 25 |

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## WATER EPH MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

**Lab Name:** Chemtech **Client:** Weston Solutions, Inc.

**Lab Code:** CHEM **Cas No:** Q1421 **SAS No :** Q1421 **SDG No:** Q1421

**Sample No :** Q1421-05 **Datafile:** FD049121.D

**Client ID :** P001-CLAY-CF01-01MS

| COMPOUND | SPIKE ADDED ug/l | SAMPLE CONCENTRATION ug/l | MS/MSD CONCENTRATION ug/l | % REC | Qual | QC LIMITS |
|---|---|---|---|---|---|---|
| Aromatic C10-C12 | 200 | 0 | 188 | 94 | | (40-140) |
| Aromatic C12-C16 | 300 | 12.2 | 304 | 97 | | (40-140) |
| Aromatic C16-C21 | 500 | 43.0 | 542 | 100 | | (40-140) |
| Aromatic C21-C36 | 800 | 0 | 888 | 111 | | (40-140) |

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## WATER EPH MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

**Lab Name:** Chemtech **Client:** Weston Solutions, Inc.

**Lab Code:** CHEM **Cas No:** Q1421 **SAS No :** Q1421 **SDG No:** Q1421

**Sample No :** Q1421-06 **Datafile:** FD049122.D

**Client ID :** P001-CLAY-CF01-01MSD

| COMPOUND | SPIKE ADDED ug/l | SAMPLE CONCENTRATION ug/l | MS/MSD CONCENTRATION ug/l | % REC | Qual | RPD \| | QC LIMITS | QC Limit Of RPD |
|---|---|---|---|---|---|---|---|---|
| Aromatic C10-C12 | 200 | 0 | 189 | 94 | | 0.53 \| | (40-140) | 25 |
| Aromatic C12-C16 | 300 | 12.2 | 308 | 99 | | 1.33 \| | (40-140) | 25 |
| Aromatic C16-C21 | 500 | 43.0 | 541 | 100 | | 0.2 \| | (40-140) | 25 |
| Aromatic C21-C36 | 800 | 0 | 837 | 104 | | 6.51 \| | (40-140) | 25 |

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## SOLID EPH MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

**Lab Name:** Chemtech **Client:** Weston Solutions, Inc.

**Lab Code:** CHEM **Cas No:** Q1421 **SAS No :** Q1421 **SDG No:** Q1421

**Sample No :** Q1421-02 **Datafile:** FD049142.D

**Client ID :** P001-CLAY-CF01-01MS

| COMPOUND | SPIKE ADDED mg/kg | SAMPLE CONCENTRATION mg/kg | MS/MSD CONCENTRATION mg/kg | % REC | Qual | QC LIMITS |
|---|---|---|---|---|---|---|
| Aromatic C10-C12 | 9.5 | 0.47 | 9.80 | 99 | | (40-140) |
| Aromatic C12-C16 | 14.2 | 0.65 | 17.2 | 116 | | (40-140) |
| Aromatic C16-C21 | 23.7 | 2.61 | 35.7 | 139 | | (40-140) |
| Aromatic C21-C36 | 37.8 | 0 | 57.2 | 151 | * | (40-140) |

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## SOLID EPH MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

**Lab Name:** Chemtech **Client:** Weston Solutions, Inc.

**Lab Code:** CHEM **Cas No:** Q1421 **SAS No :** Q1421 **SDG No:** Q1421

**Sample No :** Q1421-03 **Datafile:** FD049143.D

**Client ID :** P001-CLAY-CF01-01MSD

| COMPOUND | SPIKE ADDED mg/kg | SAMPLE CONCENTRATION mg/kg | MS/MSD CONCENTRATION mg/kg | % REC | Qual | RPD \| | QC LIMITS | QC Limit Of RPD |
|---|---|---|---|---|---|---|---|---|
| Aromatic C10-C12 | 9.5 | 0.47 | 9.34 | 94 | | 5.1 \| | (40-140) | 25 |
| Aromatic C12-C16 | 14.2 | 0.65 | 16.4 | 110 | | 5.31 \| | (40-140) | 25 |
| Aromatic C16-C21 | 23.7 | 2.61 | 34.2 | 133 | | 4.41 \| | (40-140) | 25 |
| Aromatic C21-C36 | 37.9 | 0 | 55.5 | 146 | * | 3.37 \| | (40-140) | 25 |

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## WATER EPH LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

**Lab Name:** Chemtech **Client:** Weston Solutions, Inc.

**Lab Code:** CHEM **Cas No:** Q1421 **SAS No :** Q1421 **SDG No:** Q1421

**Sample No :** PB166883BS **Datafile:** FC068307.D

**Client ID :** PB166883BS

| COMPOUND | SPIKE ADDED ug/l | LCS/LCSD CONCENTRATION ug/l | % REC | Qual | QC LIMITS |
|---|---|---|---|---|---|
| Aliphatic C9-C12 | 300 | 195 | 65 | | (40-140) |
| Aliphatic C12-C16 | 200 | 179 | 90 | | (40-140) |
| Aliphatic C16-C21 | 300 | 306 | 102 | | (40-140) |
| Aliphatic C21-C28 | 400 | 416 | 104 | | (40-140) |
| Aliphatic C28-C40 | 600 | 688 | 114 | | (40-140) |

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## SOLID EPH LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

**Lab Name:** Chemtech **Client:** Weston Solutions, Inc.

**Lab Code:** CHEM **Cas No:** Q1421 **SAS No :** Q1421 **SDG No:** Q1421

**Sample No :** PB166923BS **Datafile:** FC068323.D

**Client ID :** PB166923BS

| COMPOUND | SPIKE ADDED mg/kg | LCS/LCSD CONCENTRATION mg/kg | % REC | Qual | QC LIMITS |
|---|---|---|---|---|---|
| Aliphatic C9-C12 | 10 | 6.53 | 65 | | (40-140) |
| Aliphatic C12-C16 | 6.7 | 5.75 | 86 | | (40-140) |
| Aliphatic C16-C21 | 10 | 9.57 | 96 | | (40-140) |
| Aliphatic C21-C28 | 13.3 | 12.9 | 97 | | (40-140) |
| Aliphatic C28-C40 | 20.0 | 21.3 | 106 | | (40-140) |

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## SOLID EPH LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

**Lab Name:** Chemtech **Client:** Weston Solutions, Inc.

**Lab Code:** CHEM **Cas No:** Q1421 **SAS No :** Q1421 **SDG No:** Q1421

**Sample No :** PB166923BSD **Datafile:** FC068324.D

**Client ID :** PB166923BSD

| COMPOUND | SPIKE ADDED mg/kg | LCS/LCSD CONCENTRATION mg/kg | % REC | Qual | RPD \| | QC LIMITS | QC Limit Of RPD |
|---|---|---|---|---|---|---|---|
| Aliphatic C9-C12 | 10 | 6.56 | 66 | | 0.37\| | (40-140) | 50 |
| Aliphatic C12-C16 | 6.7 | 5.75 | 86 | | 0\| | (40-140) | 50 |
| Aliphatic C16-C21 | 10 | 9.54 | 96 | | 0.352\| | (40-140) | 50 |
| Aliphatic C21-C28 | 13.3 | 12.9 | 97 | | 0.01\| | (40-140) | 50 |
| Aliphatic C28-C40 | 20.0 | 21.4 | 107 | | 1\| | (40-140) | 50 |

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## WATER EPH LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

**Lab Name:** Chemtech **Client:** Weston Solutions, Inc.

**Lab Code:** CHEM **Cas No:** Q1421 **SAS No :** Q1421 **SDG No:** Q1421

**Sample No :** PB166883BS **Datafile:** FD049116.D

**Client ID :** PB166883BS

| COMPOUND | SPIKE ADDED ug/l | LCS/LCSD CONCENTRATION ug/l | % REC | Qual | QC LIMITS |
|---|---|---|---|---|---|
| Aromatic C10-C12 | 200 | 205 | 102 | | (40-140) |
| Aromatic C12-C16 | 300 | 352 | 117 | | (40-140) |
| Aromatic C16-C21 | 500 | 679 | 135 | | (40-140) |
| Aromatic C21-C36 | 800 | 1070 | 133 | | (40-140) |

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## SOLID EPH LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

**Lab Name:** Chemtech **Client:** Weston Solutions, Inc.

**Lab Code:** CHEM **Cas No:** Q1421 **SAS No :** Q1421 **SDG No:** Q1421

**Sample No :** PB166923BS **Datafile:** FD049131.D

**Client ID :** PB166923BS

| COMPOUND | SPIKE ADDED mg/kg | LCS/LCSD CONCENTRATION mg/kg | % REC | Qual | QC LIMITS |
|---|---|---|---|---|---|
| Aromatic C10-C12 | 6.7 | 6.49 | 97 | | (40-140) |
| Aromatic C12-C16 | 10 | 11.1 | 111 | | (40-140) |
| Aromatic C16-C21 | 16.7 | 21.5 | 129 | | (40-140) |
| Aromatic C21-C36 | 26.6 | 34.3 | 128 | | (40-140) |

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## SOLID EPH LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

**Lab Name:** Chemtech **Client:** Weston Solutions, Inc.

**Lab Code:** CHEM **Cas No:** Q1421 **SAS No :** Q1421 **SDG No:** Q1421

**Sample No :** PB166923BSD **Datafile:** FD049132.D

**Client ID :** PB166923BSD

| COMPOUND | SPIKE ADDED mg/kg | LCS/LCSD CONCENTRATION mg/kg | % REC | Qual | RPD \| | QC LIMITS | QC Limit Of RPD |
|---|---|---|---|---|---|---|---|
| Aromatic C10-C12 | 6.7 | 6.56 | 98 | | 1.1\| | (40-140) | 50 |
| Aromatic C12-C16 | 10 | 11.3 | 113 | | 1.9\| | (40-140) | 50 |
| Aromatic C16-C21 | 16.7 | 21.8 | 130 | | 1.5\| | (40-140) | 50 |
| Aromatic C21-C36 | 26.6 | 34.9 | 130 | | 2.3\| | (40-140) | 50 |

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4B

METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB166883BL

Lab Name: CHEMTECH Contract: ROYF02

Lab Code: CHEM Case No.: Q1421 SAS No.: Q1421 SDG NO.: Q1421

Instrument ID: FID_C Lab Sample ID: PB166883BL

Matrix: (soil/water) Water Date Extracted: 2/26/2025 11:45:00

Level: (low/med) low

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

| EPA SAMPLE NO. | LAB SAMPLE ID |
|---|---|
| PB166883BS | PB166883BS |
| P001-CLAY-CF02-01 | Q1421-10 |
| P001-CLAY-CF01-01 | Q1421-04 |
| P001-CLAY-CF01-01MS | Q1421-05 |
| P001-CLAY-CF01-01MSD | Q1421-06 |
| P001-CLAY-CF01-02 | Q1421-08 |
| PB166883TB | PB166883TB |

COMMENTS:

Form IV

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4B
METHOD BLANK SUMMARY

EPA SAMPLE NO.
PB166923BL

Lab Name: CHEMTECH Contract: ROYF02

Lab Code: CHEM Case No.: Q1421 SAS No.: Q1421 SDG NO.: Q1421

Instrument ID: FID_C Lab Sample ID: PB166923BL

Matrix: (soil/water) Solid Date Extracted: 2/27/2025 1:10:00 P

Level: (low/med) low

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

| EPA SAMPLE NO. | LAB SAMPLE ID |
|---|---|
| PB166923BS | PB166923BS |
| PB166923BSD | PB166923BSD |
| P001-CLAY-CF01-01 | Q1421-01 |
| P001-CLAY-CF01-01MS | Q1421-02 |
| P001-CLAY-CF01-01MSD | Q1421-03 |
| P001-CLAY-CF01-02 | Q1421-07 |
| P001-CLAY-CF02-01 | Q1421-09 |

COMMENTS:

# SAMPLE DATA

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Weston Solutions, Inc. | Date Collected: | 02/24/25 |
| Project: | RFP 905 | Date Received: | 02/24/25 |
| Client Sample ID: | P001-CLAY-CF01-01 | SDG No.: | Q1421 |
| Lab Sample ID: | Q1421-01 | Matrix: | Solid |
| Analytical Method: | NJEPH | % Solid: | 70.3 |
| Sample Wt/Vol: | 30.05 Units: g | Final Vol: | 2000 uL |
| Soil Aliquot Vol: | uL | Test: | EPH |
| Prep Method : | | | |

| Prep Date : | Date Analyzed : | Prep Batch ID |
|---|---|---|
| 02/27/25 13:10 | 02/28/25 17:44 | PB166923 |

| CAS Number | Parameter | Conc. | Qualifier | Dilution | MDL | LOQ / CRQL | Units(Dry Weight) | Datafile |
|---|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | | |
| Aliphatic C9-C12 | Aliphatic C9-C12 | 0.54 | U | 1 | 0.54 | 1.42 | mg/kg | FC068332.D |
| Aliphatic C12-C16 | Aliphatic C12-C16 | 0.50 | J | 1 | 0.34 | 0.95 | mg/kg | FC068332.D |
| Aliphatic C16-C21 | Aliphatic C16-C21 | 0.43 | J | 1 | 0.43 | 1.42 | mg/kg | FC068332.D |
| Aliphatic C21-C28 | Aliphatic C21-C28 | 1.14 | U | 1 | 1.14 | 1.89 | mg/kg | FC068332.D |
| Aliphatic C28-C40 | Aliphatic C28-C40 | 2.80 | J | 1 | 2.56 | 2.84 | mg/kg | FC068332.D |
| Aromatic C10-C12 | Aromatic C10-C12 | 0.47 | J | 1 | 0.43 | 0.95 | mg/kg | FD049140.D |
| Aromatic C12-C16 | Aromatic C12-C16 | 0.65 | J | 1 | 0.48 | 1.42 | mg/kg | FD049140.D |
| Aromatic C16-C21 | Aromatic C16-C21 | 2.61 | | 1 | 1.36 | 2.37 | mg/kg | FD049140.D |
| Aromatic C21-C36 | Aromatic C21-C36 | 2.84 | U | 1 | 2.84 | 3.79 | mg/kg | FD049140.D |
| Total AliphaticEPH | Total AliphaticEPH | 5.01 | U | | 5.01 | 8.52 | mg/kg | |
| Total AromaticEPH | Total AromaticEPH | 5.11 | U | | 5.11 | 8.53 | mg/kg | |
| Total EPH | Total EPH | 10.1 | U | | 10.1 | 17.0 | mg/kg | |

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control 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

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Weston Solutions, Inc. | Date Collected: | 02/24/25 |
| Project: | RFP 905 | Date Received: | 02/24/25 |
| Client Sample ID: | P001-CLAY-CF01-01 | SDG No.: | Q1421 |
| Lab Sample ID: | Q1421-01 | Matrix: | Solid |
| Analytical Method: | NJEPH | % Solid: | 70.3 |
| Sample Wt/Vol: | 30.05 Units: g | Final Vol: | 2000 uL |
| Soil Aliquot Vol: | uL | Test: | EPH |
| Prep Method : | | | |

| File ID : | Dilution: | Prep Date : | Date Analyzed : | Prep Batch ID |
|---|---|---|---|---|
| FC068332.D | 1 | 02/27/25 | 02/28/25 | PB166923 |

| CAS Number | Parameter | | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | |
| Aliphatic C9-C12 | Aliphatic C9-C12 | | 0.54 | U | 0.54 | 1.42 | mg/kg |
| Aliphatic C12-C16 | Aliphatic C12-C16 | | 0.50 | J | 0.34 | 0.95 | mg/kg |
| Aliphatic C16-C21 | Aliphatic C16-C21 | | 0.43 | J | 0.43 | 1.42 | mg/kg |
| Aliphatic C21-C28 | Aliphatic C21-C28 | | 1.14 | U | 1.14 | 1.89 | mg/kg |
| Aliphatic C28-C40 | Aliphatic C28-C40 | | 2.80 | J | 2.56 | 2.84 | mg/kg |
| **SURROGATES** | | | | | | | |
| 3383-33-2 | 1-chlorooctadecane (SURR) | | 52.6 | | 40 - 140 | 105% | SPK: 50 |
| 84-15-1 | ortho-Terphenyl (SURR) | | 0.00 | | 40 - 140 | 0% | SPK: 50 |

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# Quantitation Report For Aliphatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | Q1421-01 | Acq On: | 28 Feb 2025 17:44 |
| Client Sample ID: | P001-CLAY-CF01-01 | Operator: | YP/AJ |
| Data file: | FC068332.D | Misc: | |
| Instrument: | FID_C | ALS Vial: | 19 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aliphatic C9-C12 | 3.104 | 6.369 | 427569 | 3.032 | 300 | ug/ml |
| Aliphatic C12-C16 | 6.370 | 9.754 | 720630 | 5.273 | 200 | ug/ml |
| Aliphatic C16-C21 | 9.755 | 13.107 | 594221 | 4.514 | 300 | ug/ml |
| Aliphatic C21-C28 | 13.108 | 16.761 | 597602 | 4.871 | 400 | ug/ml |
| Aliphatic C28-C40 | 16.762 | 21.565 | 3044821 | 29.606 | 600 | ug/ml |
| Aliphatic EPH | 3.104 | 21.565 | 5384843 | 47.296 | | ug/ml |
| ortho-Terphenyl (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |
| 1-chlorooctadecane (SURR) | 12.840 | 12.840 | 5911856 | 52.56 | | ug/ml |
| Aliphatic C9-C28 | 3.104 | 16.761 | 2340022 | 17.69 | 1200 | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022825AL\
Data File : FC068332.D
Signal(s) : FID1A.ch
Acq On : 28 Feb 2025 17:44
Operator : YP/AJ
Sample : Q1421-01
Misc :
ALS Vial : 19 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
P001-CLAY-CF01-01

Integration File: autoint1.e
Quant Time: Mar 05 05:24:35 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

| Compound | R.T. | Response | Conc Units |
|---|---|---|---|
| System Monitoring Compounds | | | |
| 12) S 1-chlorooctadecane (S... | 12.840 | 5911856 | 52.562 ug/ml |
| Spiked Amount 50.000 | | Recovery = 105.12% | |
| Target Compounds | | | |

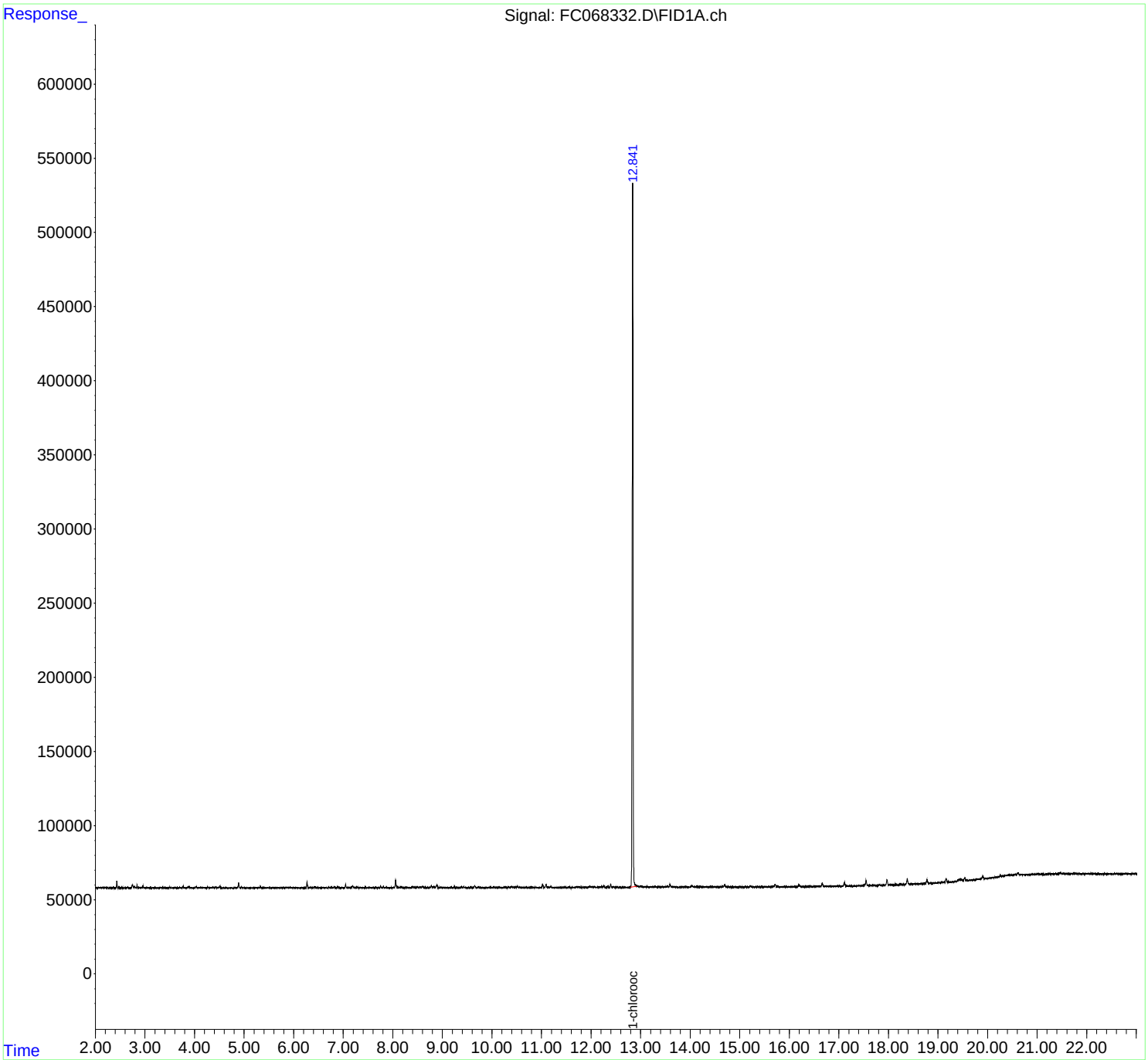
(f)=RT Delta > 1/2 Window (m)=manual int.

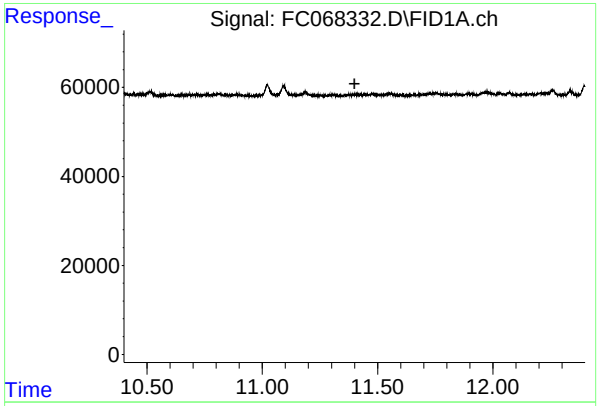
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022825AL\
Data File : FC068332.D
Signal(s) : FID1A.ch
Acq On : 28 Feb 2025 17:44
Operator : YP/AJ
Sample : Q1421-01
Misc :
ALS Vial : 19 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
P001-CLAY-CF01-01

Integration File: autoint1.e
Quant Time: Mar 05 05:24:35 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

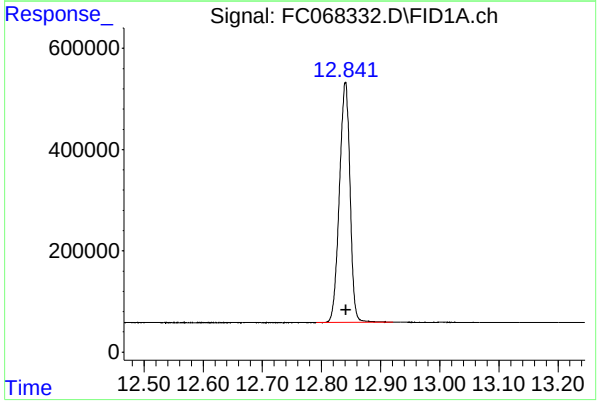





#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.400 min
Response: 0
Conc: N.D.

**Instrument :**
FID_C
**ClientSampleId :**
P001-CLAY-CF01-01




#12 1-chlorooctadecane (SURR)

R.T.: 12.840 min
Delta R.T.: -0.001 min
Response: 5911856
Conc: 52.56 ug/ml

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022825AL\
Data File : FC068332.D
Signal(s) : FID1A.ch
Acq On : 28 Feb 2025 17:44
Sample : Q1421-01
Misc :
ALS Vial : 19 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Title : GC Extractables

Signal : FID1A.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 2.358 | 2.304 | 2.382 | BV | 308 | 2921 | 0.05% | 0.025% |
| 2 | 2.395 | 2.382 | 2.408 | PV | 93 | 825 | 0.01% | 0.007% |
| 3 | 2.431 | 2.408 | 2.458 | VV | 4757 | 37453 | 0.63% | 0.314% |
| 4 | 2.472 | 2.458 | 2.544 | VV | 777 | 8861 | 0.15% | 0.074% |
| 5 | 2.555 | 2.544 | 2.568 | VV | 134 | 853 | 0.01% | 0.007% |
| 6 | 2.593 | 2.568 | 2.619 | PV | 217 | 2529 | 0.04% | 0.021% |
| 7 | 2.655 | 2.619 | 2.701 | VV | 606 | 7855 | 0.13% | 0.066% |
| 8 | 2.744 | 2.701 | 2.773 | VV | 1996 | 32456 | 0.54% | 0.272% |
| 9 | 2.788 | 2.773 | 2.820 | VV | 1382 | 14788 | 0.25% | 0.124% |
| 10 | 2.838 | 2.820 | 2.864 | VV | 1475 | 14901 | 0.25% | 0.125% |
| 11 | 2.876 | 2.864 | 2.904 | VV | 163 | 2528 | 0.04% | 0.021% |
| 12 | 2.918 | 2.904 | 2.938 | VV | 253 | 3683 | 0.06% | 0.031% |
| 13 | 2.960 | 2.938 | 3.036 | VV | 1359 | 17646 | 0.29% | 0.148% |
| 14 | 3.041 | 3.036 | 3.111 | VV | 157 | 4107 | 0.07% | 0.034% |
| 15 | 3.122 | 3.111 | 3.178 | VV | 80 | 3032 | 0.05% | 0.025% |
| 16 | 3.206 | 3.178 | 3.224 | VV | 327 | 4300 | 0.07% | 0.036% |
| 17 | 3.234 | 3.224 | 3.263 | VV | 132 | 1535 | 0.03% | 0.013% |
| 18 | 3.302 | 3.263 | 3.332 | VV | 152 | 2899 | 0.05% | 0.024% |
| 19 | 3.360 | 3.332 | 3.386 | VV | 569 | 5503 | 0.09% | 0.046% |
| 20 | 3.499 | 3.386 | 3.514 | VV | 673 | 10274 | 0.17% | 0.086% |
| 21 | 3.525 | 3.514 | 3.557 | VV | 266 | 3440 | 0.06% | 0.029% |
| 22 | 3.572 | 3.557 | 3.589 | VV | 207 | 2147 | 0.04% | 0.018% |
| 23 | 3.603 | 3.589 | 3.625 | VV | 149 | 2147 | 0.04% | 0.018% |
| 24 | 3.639 | 3.625 | 3.652 | VV | 115 | 1090 | 0.02% | 0.009% |
| 25 | 3.694 | 3.652 | 3.746 | VV | 341 | 8245 | 0.14% | 0.069% |
| 26 | 3.769 | 3.746 | 3.807 | VV | 1360 | 14902 | 0.25% | 0.125% |
| 27 | 3.828 | 3.807 | 3.837 | VV | 117 | 1639 | 0.03% | 0.014% |
| 28 | 3.866 | 3.837 | 3.878 | VV | 572 | 6677 | 0.11% | 0.056% |
| 29 | 3.893 | 3.878 | 3.941 | VV | 898 | 12315 | 0.21% | 0.103% |
| 30 | 3.960 | 3.941 | 3.984 | VV | 153 | 2286 | 0.04% | 0.019% |
| 31 | 4.029 | 3.984 | 4.066 | VV | 898 | 18341 | 0.31% | 0.154% |
| 32 | 4.082 | 4.066 | 4.168 | VV | 190 | 7837 | 0.13% | 0.066% |
| 33 | 4.212 | 4.168 | 4.244 | VV | 205 | 5638 | 0.09% | 0.047% |
| 34 | 4.263 | 4.244 | 4.286 | VV | 679 | 9884 | 0.17% | 0.083% |
| 35 | 4.301 | 4.286 | 4.317 | VV | 424 | 4894 | 0.08% | 0.041% |
| 36 | 4.336 | 4.317 | 4.346 | VV | 205 | 2918 | 0.05% | 0.024% |

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|---|---|---|---|---|---|---|---|---|
| 37 | 4.370 | 4.346 | 4.392 | VV | 497 | 7966 | 0.13% | 0.067% |
| 38 | 4.428 | 4.392 | 4.448 | VV | 1142 | 15096 | 0.25% | 0.127% |
| 39 | 4.484 | 4.448 | 4.497 | VV | 716 | 10564 | 0.18% | 0.089% |
| 40 | 4.513 | 4.497 | 4.544 | VV | 1431 | 14498 | 0.24% | 0.122% |
| 41 | 4.557 | 4.544 | 4.594 | VV | 154 | 2920 | 0.05% | 0.024% |
| 42 | 4.632 | 4.594 | 4.698 | VV | 220 | 6078 | 0.10% | 0.051% |
| 43 | 4.717 | 4.698 | 4.742 | VV | 129 | 2083 | 0.03% | 0.017% |
| 44 | 4.753 | 4.742 | 4.770 | VV | 60 | 1110 | 0.02% | 0.009% |
| 45 | 4.778 | 4.770 | 4.790 | VV | 104 | 821 | 0.01% | 0.007% |
| 46 | 4.809 | 4.790 | 4.835 | VV | 201 | 2905 | 0.05% | 0.024% |
| 47 | 4.889 | 4.835 | 4.918 | VV | 3580 | 44419 | 0.74% | 0.373% |
| 48 | 4.946 | 4.918 | 4.962 | VV | 697 | 8804 | 0.15% | 0.074% |
| 49 | 4.970 | 4.962 | 4.985 | VV | 229 | 2390 | 0.04% | 0.020% |
| 50 | 4.994 | 4.985 | 5.044 | VV | 139 | 3001 | 0.05% | 0.025% |
| 51 | 5.081 | 5.064 | 5.101 | VV | 215 | 2330 | 0.04% | 0.020% |
| 52 | 5.108 | 5.101 | 5.134 | VV | 92 | 1884 | 0.03% | 0.016% |
| 53 | 5.138 | 5.134 | 5.158 | VV | 116 | 1049 | 0.02% | 0.009% |
| 54 | 5.173 | 5.158 | 5.194 | VV | 176 | 2682 | 0.04% | 0.022% |
| 55 | 5.198 | 5.194 | 5.223 | VV | 116 | 1481 | 0.02% | 0.012% |
| 56 | 5.240 | 5.223 | 5.273 | VV | 212 | 3268 | 0.05% | 0.027% |
| 57 | 5.292 | 5.273 | 5.311 | VV | 552 | 6523 | 0.11% | 0.055% |
| 58 | 5.331 | 5.311 | 5.370 | VV | 1080 | 14684 | 0.25% | 0.123% |
| 59 | 5.389 | 5.370 | 5.438 | VV | 280 | 4795 | 0.08% | 0.040% |
| 60 | 5.473 | 5.438 | 5.527 | VV | 288 | 6640 | 0.11% | 0.056% |
| 61 | 5.538 | 5.527 | 5.548 | PV | 92 | 915 | 0.02% | 0.008% |
| 62 | 5.579 | 5.548 | 5.604 | VV | 244 | 4623 | 0.08% | 0.039% |
| 63 | 5.633 | 5.604 | 5.717 | VV | 220 | 7175 | 0.12% | 0.060% |
| 64 | 5.738 | 5.717 | 5.754 | VV | 160 | 2228 | 0.04% | 0.019% |
| 65 | 5.791 | 5.754 | 5.810 | VV | 165 | 3454 | 0.06% | 0.029% |
| 66 | 5.844 | 5.810 | 5.870 | VV | 362 | 7589 | 0.13% | 0.064% |
| 67 | 5.887 | 5.870 | 5.912 | VV | 335 | 5580 | 0.09% | 0.047% |
| 68 | 5.929 | 5.912 | 5.969 | VV | 568 | 9881 | 0.16% | 0.083% |
| 69 | 5.992 | 5.969 | 6.022 | VV | 376 | 7021 | 0.12% | 0.059% |
| 70 | 6.060 | 6.022 | 6.092 | VV | 354 | 8233 | 0.14% | 0.069% |
| 71 | 6.103 | 6.092 | 6.151 | VV | 127 | 3607 | 0.06% | 0.030% |
| 72 | 6.162 | 6.151 | 6.221 | VV | 186 | 4365 | 0.07% | 0.037% |
| 73 | 6.269 | 6.221 | 6.330 | VV | 4111 | 54382 | 0.91% | 0.456% |
| 74 | 6.351 | 6.330 | 6.374 | VV | 662 | 8582 | 0.14% | 0.072% |
| 75 | 6.386 | 6.374 | 6.398 | VV | 403 | 3864 | 0.06% | 0.032% |
| 76 | 6.417 | 6.398 | 6.439 | VV | 947 | 12372 | 0.21% | 0.104% |
| 77 | 6.450 | 6.439 | 6.474 | VV | 378 | 4539 | 0.08% | 0.038% |
| 78 | 6.489 | 6.474 | 6.511 | VV | 564 | 6385 | 0.11% | 0.054% |
| 79 | 6.518 | 6.511 | 6.564 | VV | 139 | 3094 | 0.05% | 0.026% |
| 80 | 6.575 | 6.564 | 6.608 | VV | 150 | 2927 | 0.05% | 0.025% |
| 81 | 6.632 | 6.608 | 6.679 | VV | 247 | 5214 | 0.09% | 0.044% |
| 82 | 6.708 | 6.679 | 6.736 | VV | 586 | 8464 | 0.14% | 0.071% |
| 83 | 6.762 | 6.736 | 6.794 | VV | 707 | 13320 | 0.22% | 0.112% |
| 84 | 6.811 | 6.794 | 6.854 | VV | 655 | 14334 | 0.24% | 0.120% |
| 85 | 6.887 | 6.854 | 6.908 | VV | 1026 | 15867 | 0.26% | 0.133% |
| 86 | 6.919 | 6.908 | 6.943 | VV | 253 | 3639 | 0.06% | 0.031% |
| 87 | 6.967 | 6.943 | 7.020 | VV | 291 | 8174 | 0.14% | 0.069% |
| 88 | 7.048 | 7.020 | 7.080 | VV | 2397 | 28048 | 0.47% | 0.235% |
| 89 | 7.122 | 7.080 | 7.138 | VV | 364 | 7850 | 0.13% | 0.066% |

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|---|---|---|---|---|---|---|---|---|
| 90 | 7.155 | 7.138 | 7.165 | VV | 370 | 4335 | 0.07% | 0.036% |
| 91 | 7.189 | 7.165 | 7.234 | VV | 1694 | 26145 | 0.44% | 0.219% |
| 92 | 7.250 | 7.234 | 7.264 | VV | 418 | 5844 | 0.10% | 0.049% |
| 93 | 7.279 | 7.264 | 7.321 | VV | 545 | 8527 | 0.14% | 0.072% |
| 94 | 7.338 | 7.321 | 7.348 | VV | 225 | 3302 | 0.06% | 0.028% |
| 95 | 7.355 | 7.348 | 7.374 | VV | 234 | 2804 | 0.05% | 0.024% |
| 96 | 7.389 | 7.374 | 7.420 | VV | 195 | 4099 | 0.07% | 0.034% |
| 97 | 7.448 | 7.420 | 7.481 | VV | 938 | 12457 | 0.21% | 0.104% |
| 98 | 7.538 | 7.481 | 7.578 | VV | 234 | 7207 | 0.12% | 0.060% |
| 99 | 7.612 | 7.578 | 7.651 | VV | 236 | 7412 | 0.12% | 0.062% |
| 100 | 7.661 | 7.651 | 7.691 | VV | 276 | 3731 | 0.06% | 0.031% |
| 101 | 7.709 | 7.691 | 7.730 | VV | 348 | 3990 | 0.07% | 0.033% |
| 102 | 7.753 | 7.730 | 7.781 | VV | 929 | 11879 | 0.20% | 0.100% |
| 103 | 7.809 | 7.781 | 7.831 | VV | 1022 | 12845 | 0.21% | 0.108% |
| 104 | 7.846 | 7.831 | 7.860 | VV | 248 | 2919 | 0.05% | 0.024% |
| 105 | 7.877 | 7.860 | 7.898 | VV | 352 | 5048 | 0.08% | 0.042% |
| 106 | 7.965 | 7.898 | 8.027 | VV | 595 | 14748 | 0.25% | 0.124% |
| 107 | 8.057 | 8.027 | 8.131 | VV | 5384 | 78184 | 1.31% | 0.656% |
| 108 | 8.156 | 8.131 | 8.186 | VV | 600 | 15163 | 0.25% | 0.127% |
| 109 | 8.202 | 8.186 | 8.224 | VV | 459 | 7860 | 0.13% | 0.066% |
| 110 | 8.248 | 8.224 | 8.271 | VV | 431 | 7091 | 0.12% | 0.059% |
| 111 | 8.288 | 8.271 | 8.316 | VV | 524 | 7048 | 0.12% | 0.059% |
| 112 | 8.396 | 8.316 | 8.453 | VV | 604 | 25987 | 0.43% | 0.218% |
| 113 | 8.463 | 8.453 | 8.491 | VV | 402 | 7645 | 0.13% | 0.064% |
| 114 | 8.512 | 8.491 | 8.531 | VV | 509 | 9782 | 0.16% | 0.082% |
| 115 | 8.545 | 8.531 | 8.573 | VV | 585 | 11445 | 0.19% | 0.096% |
| 116 | 8.593 | 8.573 | 8.638 | VV | 1093 | 22784 | 0.38% | 0.191% |
| 117 | 8.654 | 8.638 | 8.684 | VV | 427 | 7160 | 0.12% | 0.060% |
| 118 | 8.708 | 8.684 | 8.734 | VV | 374 | 5903 | 0.10% | 0.050% |
| 119 | 8.776 | 8.734 | 8.796 | VV | 1656 | 24768 | 0.41% | 0.208% |
| 120 | 8.811 | 8.796 | 8.858 | VV | 873 | 21990 | 0.37% | 0.184% |
| 121 | 8.889 | 8.858 | 8.941 | VV | 2139 | 43965 | 0.73% | 0.369% |
| 122 | 8.964 | 8.941 | 8.991 | VV | 558 | 9365 | 0.16% | 0.079% |
| 123 | 9.012 | 8.991 | 9.028 | VV | 362 | 5492 | 0.09% | 0.046% |
| 124 | 9.063 | 9.028 | 9.081 | VV | 262 | 5370 | 0.09% | 0.045% |
| 125 | 9.091 | 9.081 | 9.128 | VV | 255 | 6082 | 0.10% | 0.051% |
| 126 | 9.176 | 9.128 | 9.218 | VV | 566 | 14610 | 0.24% | 0.123% |
| 127 | 9.242 | 9.218 | 9.274 | VV | 901 | 14384 | 0.24% | 0.121% |
| 128 | 9.294 | 9.274 | 9.308 | VV | 363 | 4558 | 0.08% | 0.038% |
| 129 | 9.311 | 9.308 | 9.328 | VV | 302 | 2581 | 0.04% | 0.022% |
| 130 | 9.340 | 9.328 | 9.354 | VV | 252 | 2858 | 0.05% | 0.024% |
| 131 | 9.383 | 9.354 | 9.414 | VV | 502 | 10052 | 0.17% | 0.084% |
| 132 | 9.433 | 9.414 | 9.470 | VV | 943 | 13520 | 0.23% | 0.113% |
| 133 | 9.493 | 9.470 | 9.510 | VV | 216 | 3458 | 0.06% | 0.029% |
| 134 | 9.525 | 9.510 | 9.550 | VV | 183 | 3233 | 0.05% | 0.027% |
| 135 | 9.575 | 9.550 | 9.631 | VV | 385 | 10323 | 0.17% | 0.087% |
| 136 | 9.653 | 9.631 | 9.706 | VV | 1594 | 27324 | 0.46% | 0.229% |
| 137 | 9.723 | 9.706 | 9.806 | VV | 354 | 15262 | 0.25% | 0.128% |
| 138 | 9.822 | 9.806 | 9.840 | VV | 262 | 3735 | 0.06% | 0.031% |
| 139 | 9.968 | 9.840 | 10.010 | PV | 381 | 18748 | 0.31% | 0.157% |
| 140 | 10.043 | 10.010 | 10.063 | VV | 487 | 11133 | 0.19% | 0.093% |
| 141 | 10.078 | 10.063 | 10.111 | VV | 415 | 8468 | 0.14% | 0.071% |

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|---|---|---|---|---|---|---|---|---|
| 142 | 10.130 | 10.111 | 10.171 | VV | 348 | 9634 | 0.16% | 0.081% |
| 143 | 10.179 | 10.171 | 10.228 | VV | 248 | 6914 | 0.12% | 0.058% |
| 144 | 10.251 | 10.228 | 10.264 | VV | 428 | 6514 | 0.11% | 0.055% |
| 145 | 10.281 | 10.264 | 10.304 | VV | 383 | 6563 | 0.11% | 0.055% |
| 146 | 10.322 | 10.304 | 10.354 | VV | 599 | 11256 | 0.19% | 0.094% |
| 147 | 10.392 | 10.354 | 10.424 | VV | 774 | 21076 | 0.35% | 0.177% |
| 148 | 10.444 | 10.424 | 10.457 | VV | 535 | 7842 | 0.13% | 0.066% |
| 149 | 10.469 | 10.457 | 10.486 | VV | 474 | 7148 | 0.12% | 0.060% |
| 150 | 10.515 | 10.486 | 10.548 | VV | 1006 | 20238 | 0.34% | 0.170% |
| 151 | 10.558 | 10.548 | 10.565 | VV | 248 | 2195 | 0.04% | 0.018% |
| 152 | 10.572 | 10.565 | 10.587 | VV | 283 | 3047 | 0.05% | 0.026% |
| 153 | 10.603 | 10.587 | 10.631 | VV | 280 | 5504 | 0.09% | 0.046% |
| 154 | 10.651 | 10.631 | 10.668 | VV | 233 | 3642 | 0.06% | 0.031% |
| 155 | 10.676 | 10.668 | 10.691 | VV | 237 | 2609 | 0.04% | 0.022% |
| 156 | 10.711 | 10.691 | 10.741 | VV | 346 | 6990 | 0.12% | 0.059% |
| 157 | 10.764 | 10.741 | 10.788 | VV | 347 | 7191 | 0.12% | 0.060% |
| 158 | 10.811 | 10.788 | 10.830 | VV | 535 | 8902 | 0.15% | 0.075% |
| 159 | 10.842 | 10.830 | 10.863 | VV | 279 | 4093 | 0.07% | 0.034% |
| 160 | 10.891 | 10.863 | 10.934 | VV | 294 | 7650 | 0.13% | 0.064% |
| 161 | 10.941 | 10.934 | 10.958 | VV | 137 | 1131 | 0.02% | 0.009% |
| 162 | 11.022 | 10.958 | 11.054 | VV | 2543 | 39783 | 0.66% | 0.334% |
| 163 | 11.092 | 11.054 | 11.153 | VV | 2307 | 42358 | 0.71% | 0.355% |
| 164 | 11.186 | 11.153 | 11.268 | VV | 965 | 17969 | 0.30% | 0.151% |
| 165 | 11.317 | 11.268 | 11.347 | VV | 179 | 5042 | 0.08% | 0.042% |
| 166 | 11.439 | 11.347 | 11.454 | VV | 303 | 13578 | 0.23% | 0.114% |
| 167 | 11.478 | 11.454 | 11.509 | VV | 495 | 9394 | 0.16% | 0.079% |
| 168 | 11.548 | 11.509 | 11.591 | VV | 512 | 14021 | 0.23% | 0.118% |
| 169 | 11.755 | 11.591 | 11.819 | VV | 588 | 37030 | 0.62% | 0.311% |
| 170 | 11.840 | 11.819 | 11.873 | VV | 399 | 8102 | 0.14% | 0.068% |
| 171 | 11.891 | 11.873 | 11.938 | VV | 450 | 11471 | 0.19% | 0.096% |
| 172 | 11.976 | 11.938 | 12.010 | VV | 774 | 22960 | 0.38% | 0.193% |
| 173 | 12.028 | 12.010 | 12.051 | VV | 567 | 9950 | 0.17% | 0.083% |
| 174 | 12.071 | 12.051 | 12.111 | VV | 679 | 12520 | 0.21% | 0.105% |
| 175 | 12.160 | 12.111 | 12.178 | VV | 363 | 10512 | 0.18% | 0.088% |
| 176 | 12.208 | 12.178 | 12.218 | VV | 546 | 9402 | 0.16% | 0.079% |
| 177 | 12.259 | 12.218 | 12.304 | VV | 1212 | 27201 | 0.45% | 0.228% |
| 178 | 12.336 | 12.304 | 12.367 | VV | 1067 | 15372 | 0.26% | 0.129% |
| 179 | 12.397 | 12.367 | 12.441 | VV | 2176 | 30984 | 0.52% | 0.260% |
| 180 | 12.461 | 12.441 | 12.491 | VV | 337 | 6694 | 0.11% | 0.056% |
| 181 | 12.511 | 12.491 | 12.559 | VV | 323 | 7211 | 0.12% | 0.060% |
| 182 | 12.571 | 12.559 | 12.595 | VV | 84 | 910 | 0.02% | 0.008% |
| 183 | 12.614 | 12.595 | 12.628 | PV | 127 | 1175 | 0.02% | 0.010% |
| 184 | 12.654 | 12.628 | 12.665 | VV | 201 | 3275 | 0.05% | 0.027% |
| 185 | 12.679 | 12.665 | 12.704 | VV | 239 | 4190 | 0.07% | 0.035% |
| 186 | 12.716 | 12.704 | 12.738 | VV | 204 | 2319 | 0.04% | 0.019% |
| 187 | 12.840 | 12.738 | 12.984 | VV | 478493 | 5988440 | 100.00% | 50.229% |
| 188 | 13.005 | 12.984 | 13.043 | VV | 879 | 22664 | 0.38% | 0.190% |
| 189 | 13.063 | 13.043 | 13.103 | VV | 607 | 15911 | 0.27% | 0.133% |
| 190 | 13.123 | 13.103 | 13.173 | VV | 474 | 15059 | 0.25% | 0.126% |
| 191 | 13.219 | 13.173 | 13.243 | VV | 465 | 16757 | 0.28% | 0.141% |
| 192 | 13.291 | 13.243 | 13.338 | VV | 587 | 23146 | 0.39% | 0.194% |
| 193 | 13.350 | 13.338 | 13.374 | VV | 366 | 6498 | 0.11% | 0.055% |
| 194 | 13.396 | 13.374 | 13.404 | VV | 351 | 5414 | 0.09% | 0.045% |

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|---|---|---|---|---|---|---|---|---|
| 195 | 13.443 | 13.404 | 13.484 | VV | 465 | 18176 | 0.30% | 0.152% |
| 196 | 13.542 | 13.484 | 13.567 | VV | 959 | 24144 | 0.40% | 0.203% |
| 197 | 13.594 | 13.567 | 13.694 | VV | 2017 | 43789 | 0.73% | 0.367% |
| 198 | 13.710 | 13.694 | 13.768 | VV | 232 | 8473 | 0.14% | 0.071% |
| 199 | 13.824 | 13.768 | 13.838 | VV | 340 | 9540 | 0.16% | 0.080% |
| 200 | 13.844 | 13.838 | 13.914 | VV | 361 | 11231 | 0.19% | 0.094% |
| 201 | 13.927 | 13.914 | 14.003 | VV | 282 | 11740 | 0.20% | 0.098% |
| 202 | 14.030 | 14.003 | 14.092 | VV | 1198 | 30339 | 0.51% | 0.254% |
| 203 | 14.109 | 14.092 | 14.128 | VV | 329 | 6008 | 0.10% | 0.050% |
| 204 | 14.155 | 14.128 | 14.196 | VV | 620 | 15263 | 0.25% | 0.128% |
| 205 | 14.209 | 14.196 | 14.245 | VV | 338 | 8801 | 0.15% | 0.074% |
| 206 | 14.257 | 14.245 | 14.277 | VV | 323 | 5235 | 0.09% | 0.044% |
| 207 | 14.310 | 14.277 | 14.375 | VV | 391 | 17938 | 0.30% | 0.150% |
| 208 | 14.397 | 14.375 | 14.423 | VV | 452 | 9329 | 0.16% | 0.078% |
| 209 | 14.435 | 14.423 | 14.448 | VV | 275 | 3934 | 0.07% | 0.033% |
| 210 | 14.465 | 14.448 | 14.541 | VV | 336 | 14204 | 0.24% | 0.119% |
| 211 | 14.549 | 14.541 | 14.581 | VV | 273 | 4592 | 0.08% | 0.039% |
| 212 | 14.592 | 14.581 | 14.617 | VV | 299 | 4337 | 0.07% | 0.036% |
| 213 | 14.652 | 14.617 | 14.669 | VV | 805 | 12955 | 0.22% | 0.109% |
| 214 | 14.695 | 14.669 | 14.837 | VV | 1880 | 41129 | 0.69% | 0.345% |
| 215 | 14.862 | 14.837 | 14.917 | VV | 303 | 7423 | 0.12% | 0.062% |
| 216 | 14.925 | 14.917 | 14.993 | VV | 154 | 3935 | 0.07% | 0.033% |
| 217 | 15.003 | 14.993 | 15.028 | VV | 112 | 1232 | 0.02% | 0.010% |
| 218 | 15.054 | 15.028 | 15.075 | PV | 59 | 1469 | 0.02% | 0.012% |
| 219 | 15.117 | 15.075 | 15.164 | VV | 179 | 6646 | 0.11% | 0.056% |
| 220 | 15.176 | 15.164 | 15.188 | VV | 136 | 1381 | 0.02% | 0.012% |
| 221 | 15.215 | 15.188 | 15.289 | VV | 818 | 16410 | 0.27% | 0.138% |
| 222 | 15.297 | 15.289 | 15.304 | VV | 52 | 522 | 0.01% | 0.004% |
| 223 | 15.332 | 15.304 | 15.341 | PV | 146 | 2121 | 0.04% | 0.018% |
| 224 | 15.350 | 15.341 | 15.361 | VV | 148 | 1501 | 0.03% | 0.013% |
| 225 | 15.392 | 15.361 | 15.418 | VV | 220 | 4953 | 0.08% | 0.042% |
| 226 | 15.427 | 15.418 | 15.464 | VV | 171 | 2523 | 0.04% | 0.021% |
| 227 | 15.513 | 15.464 | 15.558 | VV | 223 | 7087 | 0.12% | 0.059% |
| 228 | 15.569 | 15.558 | 15.628 | VV | 204 | 5045 | 0.08% | 0.042% |
| 229 | 15.639 | 15.628 | 15.643 | VV | 81 | 475 | 0.01% | 0.004% |
| 230 | 15.673 | 15.643 | 15.690 | PV | 541 | 8249 | 0.14% | 0.069% |
| 231 | 15.713 | 15.690 | 15.801 | VV | 1804 | 34607 | 0.58% | 0.290% |
| 232 | 15.896 | 15.801 | 15.921 | VV | 146 | 5151 | 0.09% | 0.043% |
| 233 | 15.935 | 15.921 | 15.944 | VV | 94 | 1011 | 0.02% | 0.008% |
| 234 | 15.971 | 15.944 | 15.989 | VV | 82 | 1523 | 0.03% | 0.013% |
| 235 | 16.042 | 15.989 | 16.053 | PV | 124 | 3030 | 0.05% | 0.025% |
| 236 | 16.063 | 16.053 | 16.144 | VV | 133 | 4457 | 0.07% | 0.037% |
| 237 | 16.195 | 16.144 | 16.234 | VV | 1461 | 24552 | 0.41% | 0.206% |
| 238 | 16.241 | 16.234 | 16.301 | VV | 218 | 5763 | 0.10% | 0.048% |
| 239 | 16.354 | 16.301 | 16.374 | VV | 249 | 5375 | 0.09% | 0.045% |
| 240 | 16.388 | 16.374 | 16.454 | VV | 238 | 6862 | 0.11% | 0.058% |
| 241 | 16.463 | 16.454 | 16.471 | VV | 118 | 1199 | 0.02% | 0.010% |
| 242 | 16.479 | 16.471 | 16.484 | VV | 157 | 908 | 0.02% | 0.008% |
| 243 | 16.501 | 16.484 | 16.512 | VV | 218 | 2646 | 0.04% | 0.022% |
| 244 | 16.545 | 16.512 | 16.561 | VV | 210 | 4782 | 0.08% | 0.040% |
| 245 | 16.587 | 16.561 | 16.598 | VV | 245 | 3679 | 0.06% | 0.031% |
| 246 | 16.662 | 16.598 | 16.763 | VV | 2442 | 53054 | 0.89% | 0.445% |

rteres

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 247 | 16.812 | 16.763 | 16.838 | VV | 181 | 5946 | 0.10% | 0.050% |
| 248 | 16.859 | 16.838 | 16.914 | VV | 148 | 3597 | 0.06% | 0.030% |
| 249 | 16.957 | 16.914 | 16.981 | PV | 262 | 5707 | 0.10% | 0.048% |
| 250 | 17.002 | 16.981 | 17.038 | VV | 229 | 4674 | 0.08% | 0.039% |
| 251 | 17.056 | 17.038 | 17.072 | VV | 111 | 1937 | 0.03% | 0.016% |
| 252 | 17.111 | 17.072 | 17.172 | VV | 2761 | 46178 | 0.77% | 0.387% |
| 253 | 17.218 | 17.172 | 17.250 | VV | 188 | 6354 | 0.11% | 0.053% |
| 254 | 17.276 | 17.250 | 17.304 | VV | 162 | 3426 | 0.06% | 0.029% |
| 255 | 17.314 | 17.304 | 17.360 | VV | 104 | 2869 | 0.05% | 0.024% |
| 256 | 17.380 | 17.360 | 17.413 | VV | 195 | 3647 | 0.06% | 0.031% |
| 257 | 17.424 | 17.413 | 17.467 | VV | 151 | 2752 | 0.05% | 0.023% |
| 258 | 17.547 | 17.467 | 17.599 | PV | 3583 | 62686 | 1.05% | 0.526% |
| 259 | 17.649 | 17.599 | 17.694 | VV | 309 | 10568 | 0.18% | 0.089% |
| 260 | 17.728 | 17.694 | 17.788 | VV | 166 | 4300 | 0.07% | 0.036% |
| 261 | 17.826 | 17.788 | 17.901 | VV | 467 | 11251 | 0.19% | 0.094% |
| 262 | 17.970 | 17.901 | 18.011 | PV | 3763 | 62291 | 1.04% | 0.522% |
| 263 | 18.027 | 18.011 | 18.114 | VV | 311 | 10130 | 0.17% | 0.085% |
| 264 | 18.144 | 18.114 | 18.168 | VV | 416 | 4867 | 0.08% | 0.041% |
| 265 | 18.234 | 18.168 | 18.301 | VV | 301 | 10838 | 0.18% | 0.091% |
| 266 | 18.379 | 18.301 | 18.448 | PV | 3828 | 67043 | 1.12% | 0.562% |
| 267 | 18.505 | 18.448 | 18.558 | VV | 235 | 7511 | 0.13% | 0.063% |
| 268 | 18.589 | 18.558 | 18.604 | VV | 115 | 2088 | 0.03% | 0.018% |
| 269 | 18.639 | 18.604 | 18.654 | PV | 201 | 4121 | 0.07% | 0.035% |
| 270 | 18.777 | 18.654 | 18.835 | VV | 2618 | 48405 | 0.81% | 0.406% |
| 271 | 18.955 | 18.835 | 18.974 | VV | 239 | 8063 | 0.13% | 0.068% |
| 272 | 19.025 | 18.974 | 19.054 | VV | 246 | 8065 | 0.13% | 0.068% |
| 273 | 19.085 | 19.054 | 19.104 | VV | 291 | 7883 | 0.13% | 0.066% |
| 274 | 19.162 | 19.104 | 19.258 | VV | 2834 | 65083 | 1.09% | 0.546% |
| 275 | 19.448 | 19.258 | 19.511 | VV | 1962 | 128777 | 2.15% | 1.080% |
| 276 | 19.537 | 19.511 | 19.624 | VV | 2533 | 78294 | 1.31% | 0.657% |
| 277 | 19.901 | 19.624 | 19.936 | VV | 3012 | 207474 | 3.46% | 1.740% |
| 278 | 19.965 | 19.936 | 19.994 | VV | 1410 | 47083 | 0.79% | 0.395% |
| 279 | 20.257 | 19.994 | 20.288 | VV | 2860 | 314821 | 5.26% | 2.641% |
| 280 | 20.434 | 20.288 | 20.454 | VV | 2899 | 251643 | 4.20% | 2.111% |
| 281 | 20.613 | 20.454 | 20.681 | VV | 3869 | 394903 | 6.59% | 3.312% |
| 282 | 20.691 | 20.681 | 20.731 | VV | 2701 | 77651 | 1.30% | 0.651% |
| 283 | 20.802 | 20.731 | 20.851 | VV | 2435 | 175787 | 2.94% | 1.474% |
| 284 | 20.857 | 20.851 | 20.879 | VV | 2438 | 39427 | 0.66% | 0.331% |
| 285 | 21.013 | 20.879 | 21.087 | VV | 2542 | 284374 | 4.75% | 2.385% |
| 286 | 21.266 | 21.087 | 21.279 | VV | 2024 | 236917 | 3.96% | 1.987% |
| 287 | 21.294 | 21.279 | 21.318 | VV | 1982 | 44856 | 0.75% | 0.376% |
| 288 | 21.330 | 21.318 | 21.351 | VV | 1949 | 37490 | 0.63% | 0.314% |
| 289 | 21.359 | 21.351 | 21.401 | VV | 1895 | 54482 | 0.91% | 0.457% |
| 290 | 21.469 | 21.401 | 21.574 | VV | 2353 | 188562 | 3.15% | 1.582% |
| 291 | 21.774 | 21.574 | 21.938 | VV | 1486 | 278435 | 4.65% | 2.335% |
| 292 | 21.981 | 21.938 | 22.048 | VV | 911 | 54274 | 0.91% | 0.455% |
| 293 | 22.105 | 22.048 | 22.124 | VV | 667 | 28533 | 0.48% | 0.239% |
| 294 | 22.138 | 22.124 | 22.307 | VV | 585 | 36410 | 0.61% | 0.305% |

Sum of corrected areas: 11922335

Aliphatic EPH 021125.M Sat Mar 01 01:29:26 2025

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Weston Solutions, Inc. | Date Collected: | 02/24/25 |
| Project: | RFP 905 | Date Received: | 02/24/25 |
| Client Sample ID: | P001-CLAY-CF01-01 | SDG No.: | Q1421 |
| Lab Sample ID: | Q1421-01 | Matrix: | Solid |
| Analytical Method: | NJEPH | % Solid: | 70.3 |
| Sample Wt/Vol: | 30.05 Units: g | Final Vol: | 2000 uL |
| Soil Aliquot Vol: | uL | Test: | EPH |
| Prep Method : | | | |

| File ID : | Dilution: | Prep Date : | Date Analyzed : | Prep Batch ID |
|---|---|---|---|---|
| FD049140.D | 1 | 02/27/25 | 02/28/25 | PB166923 |

| CAS Number | Parameter | | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | |
| Aromatic C10-C12 | Aromatic C10-C12 | | 0.47 | J | 0.43 | 0.95 | mg/kg |
| Aromatic C12-C16 | Aromatic C12-C16 | | 0.65 | J | 0.48 | 1.42 | mg/kg |
| Aromatic C16-C21 | Aromatic C16-C21 | | 2.61 | | 1.36 | 2.37 | mg/kg |
| Aromatic C21-C36 | Aromatic C21-C36 | | 2.84 | U | 2.84 | 3.79 | mg/kg |
| **SURROGATES** | | | | | | | |
| 580-13-2 | 2-Bromonaphthalene (SURR) | | 66.0 | | 40 - 140 | 132% | SPK: 50 |
| 321-60-8 | 2-Flurobiphenyl (SURR) | | 69.5 | | 40 - 140 | 139% | SPK: 50 |
| 84-15-1 | ortho-Terphenyl (SURR) | | 40.6 | | 40 - 140 | 81% | SPK: 50 |

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

# Quantitation Report For Aromatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | Q1421-01 | Acq On: | 28 Feb 2025 17:44 |
| Client Sample ID: | P001-CLAY-CF01-01 | Operator: | YP/AJ |
| Data file: | FD049140.D | Misc: | |
| Instrument: | FID_D | ALS Vial: | 69 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aromatic C10-C12 | 4.076 | 5.794 | 784409 | 4.933 | 200 | ug/ml |
| Aromatic C12-C16 | 5.795 | 8.396 | 1103291 | 6.855 | 300 | ug/ml |
| Aromatic C16-C21 | 8.397 | 12.661 | 4230619 | 27.586 | 500 | ug/ml |
| Aromatic C21-C36 | 12.662 | 18.073 | 4243205 | 29.649 | 800 | ug/ml |
| Aromatic EPH | 4.076 | 18.073 | 10361524 | 69.024 | | ug/ml |
| 2-Bromonaphthalene (SURR) | 7.352 | 7.352 | 9440086 | 65.96 | | ug/ml |
| 2-Flurobiphenyl (SURR) | 8.201 | 8.201 | 6112214 | 69.53 | | ug/ml |
| ortho-Terphenyl (SURR) | 11.235 | 11.235 | 6566627 | 40.59 | | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022825AR\
Data File : FD049140.D
Signal(s) : FID2B.ch
Acq On : 28 Feb 2025 17:44
Operator : YP/AJ
Sample : Q1421-01
Misc :
ALS Vial : 69 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF01-01

Integration File: autoint1.e
Quant Time: Mar 01 02:20:29 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

| Compound | R.T. | Response | Conc Units |
|---|---|---|---|
| System Monitoring Compounds | | | |
| 4) S 2-Bromonaphthalene (S... | 7.352 | 9440086 | 65.964 ug/ml |
| Spiked Amount 50.000 | | Recovery = | 131.93% |
| 6) S 2-Flurobiphenyl (SURR) | 8.201 | 6112214 | 69.527 ug/ml |
| Spiked Amount 50.000 Range | 0 - 131 | Recovery = | 139.05%# |
| 11) S ortho-Terphenyl (SURR) | 11.235 | 6566627 | 40.591 ug/ml |
| Spiked Amount 50.000 | | Recovery = | 81.18% |
| Target Compounds | | | |

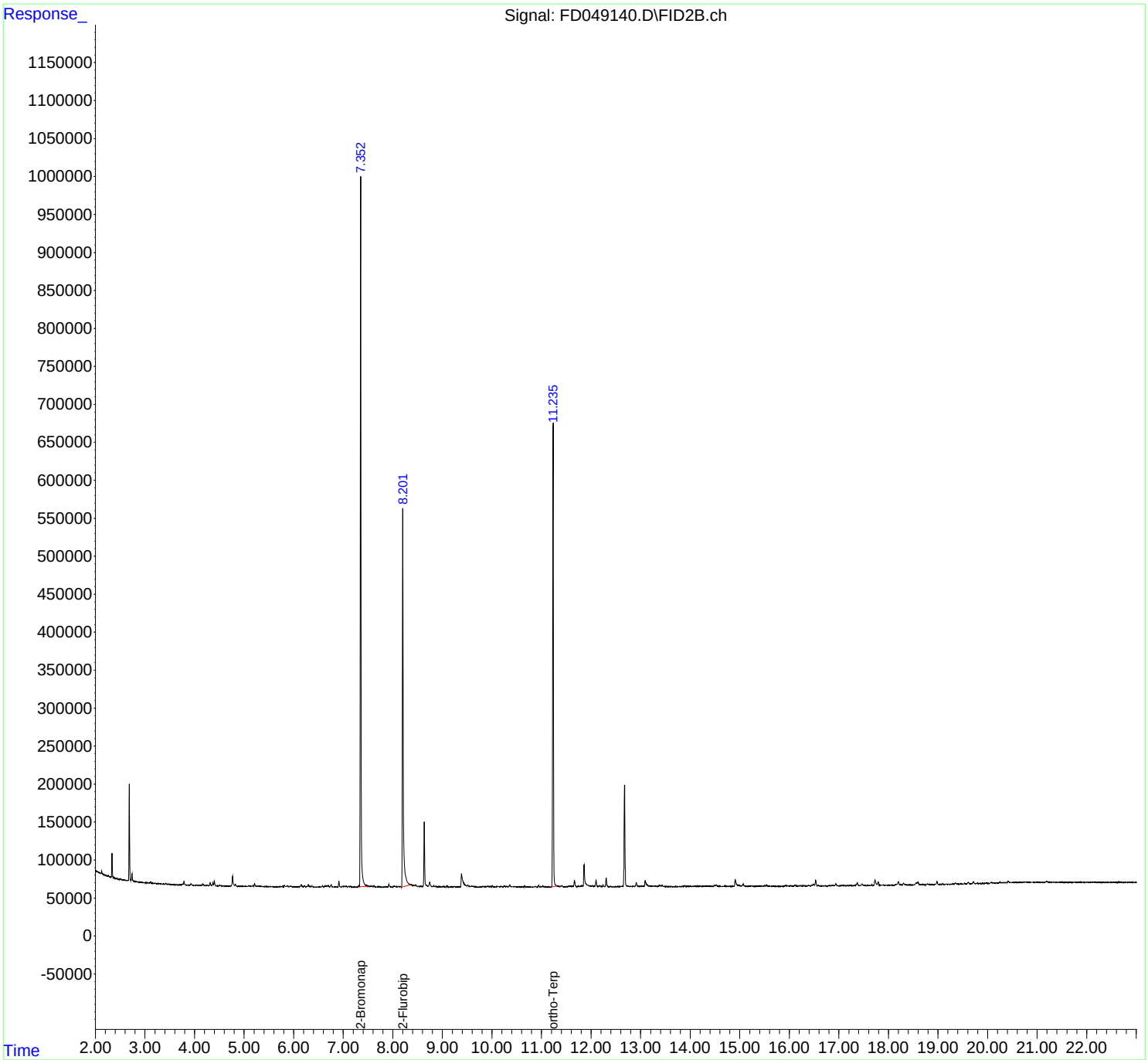
(f)=RT Delta > 1/2 Window (m)=manual int.

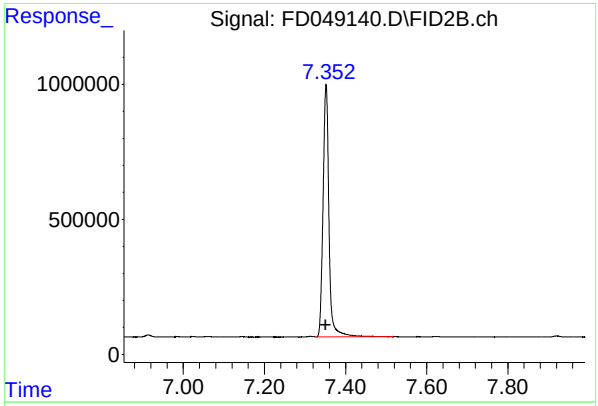
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022825AR\
Data File : FD049140.D
Signal(s) : FID2B.ch
Acq On : 28 Feb 2025 17:44
Operator : YP/AJ
Sample : Q1421-01
Misc :
ALS Vial : 69 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF01-01

Integration File: autoint1.e
Quant Time: Mar 01 02:20:29 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

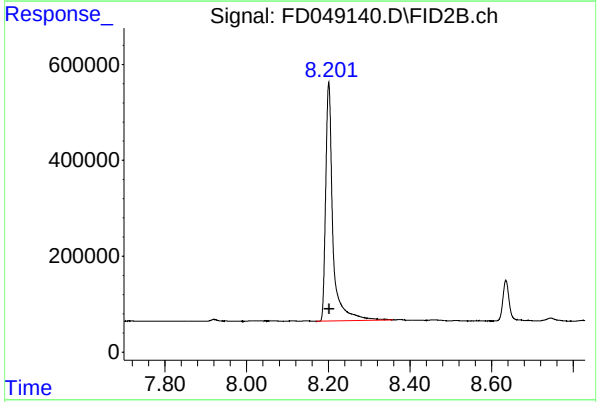





#4 2-Bromonaphthalene (SURR)

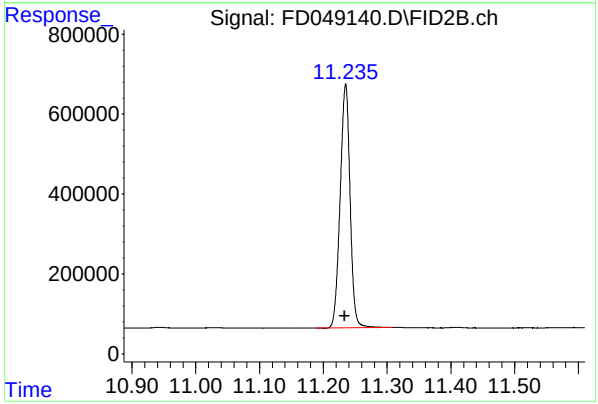
R.T.: 7.352 min
Delta R.T.: 0.000 min
Response: 9440086
Conc: 65.96 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF01-01




#6 2-Flurobiphenyl (SURR)

R.T.: 8.201 min
Delta R.T.: -0.001 min
Response: 6112214
Conc: 69.53 ug/ml




#11 ortho-Terphenyl (SURR)

R.T.: 11.235 min
Delta R.T.: 0.002 min
Response: 6566627
Conc: 40.59 ug/ml

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022825AR\
Data File : FD049140.D
Signal(s) : FID2B.ch
Acq On : 28 Feb 2025 17:44
Sample : Q1421-01
Misc :
ALS Vial : 69 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Title : GC Extractables

Signal : FID2B.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 4.100 | 4.062 | 4.112 | BV | 218 | 1589 | 0.02% | 0.005% |
| 2 | 4.129 | 4.123 | 4.142 | VV | 268 | 2078 | 0.02% | 0.006% |
| 3 | 4.160 | 4.142 | 4.222 | PV | 2211 | 36733 | 0.39% | 0.112% |
| 4 | 4.232 | 4.222 | 4.238 | VV | 432 | 2423 | 0.03% | 0.007% |
| 5 | 4.260 | 4.238 | 4.293 | VV | 897 | 13696 | 0.14% | 0.042% |
| 6 | 4.314 | 4.293 | 4.349 | VV | 4474 | 53140 | 0.56% | 0.161% |
| 7 | 4.369 | 4.349 | 4.383 | VV | 3881 | 41546 | 0.44% | 0.126% |
| 8 | 4.399 | 4.383 | 4.444 | VV | 6718 | 83245 | 0.87% | 0.253% |
| 9 | 4.452 | 4.444 | 4.468 | VV | 311 | 3033 | 0.03% | 0.009% |
| 10 | 4.496 | 4.468 | 4.500 | VV | 688 | 8419 | 0.09% | 0.026% |
| 11 | 4.510 | 4.500 | 4.540 | VV | 932 | 13517 | 0.14% | 0.041% |
| 12 | 4.544 | 4.540 | 4.552 | VV | 237 | 1478 | 0.02% | 0.004% |
| 13 | 4.558 | 4.552 | 4.566 | VV | 179 | 1231 | 0.01% | 0.004% |
| 14 | 4.578 | 4.566 | 4.588 | VV | 526 | 4348 | 0.05% | 0.013% |
| 15 | 4.592 | 4.588 | 4.625 | VV | 365 | 4608 | 0.05% | 0.014% |
| 16 | 4.628 | 4.625 | 4.648 | VV | 247 | 2238 | 0.02% | 0.007% |
| 17 | 4.669 | 4.657 | 4.678 | PV | 313 | 2523 | 0.03% | 0.008% |
| 18 | 4.687 | 4.678 | 4.703 | VV | 854 | 8312 | 0.09% | 0.025% |
| 19 | 4.709 | 4.703 | 4.725 | VV | 521 | 5192 | 0.05% | 0.016% |
| 20 | 4.767 | 4.725 | 4.812 | VV | 13555 | 191237 | 2.01% | 0.581% |
| 21 | 4.826 | 4.812 | 4.890 | VV | 2844 | 39392 | 0.41% | 0.120% |
| 22 | 4.896 | 4.890 | 4.912 | VV | 316 | 2389 | 0.03% | 0.007% |
| 23 | 4.924 | 4.912 | 4.929 | VV | 324 | 2097 | 0.02% | 0.006% |
| 24 | 4.936 | 4.929 | 4.951 | VV | 340 | 3740 | 0.04% | 0.011% |
| 25 | 4.964 | 4.951 | 4.990 | VV | 650 | 10113 | 0.11% | 0.031% |
| 26 | 4.997 | 4.990 | 5.003 | VV | 399 | 2797 | 0.03% | 0.008% |
| 27 | 5.007 | 5.003 | 5.021 | VV | 388 | 2713 | 0.03% | 0.008% |
| 28 | 5.025 | 5.021 | 5.058 | VV | 262 | 3873 | 0.04% | 0.012% |
| 29 | 5.084 | 5.065 | 5.127 | VV | 905 | 26515 | 0.28% | 0.080% |
| 30 | 5.138 | 5.127 | 5.165 | VV | 997 | 16191 | 0.17% | 0.049% |
| 31 | 5.182 | 5.165 | 5.195 | VV | 1769 | 22532 | 0.24% | 0.068% |
| 32 | 5.211 | 5.195 | 5.252 | VV | 4208 | 55798 | 0.59% | 0.169% |
| 33 | 5.269 | 5.252 | 5.300 | VV | 1315 | 20951 | 0.22% | 0.064% |
| 34 | 5.305 | 5.300 | 5.323 | VV | 430 | 5441 | 0.06% | 0.017% |
| 35 | 5.332 | 5.323 | 5.347 | VV | 686 | 7807 | 0.08% | 0.024% |
| 36 | 5.352 | 5.347 | 5.365 | VV | 611 | 4991 | 0.05% | 0.015% |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 37 | 5.373 | 5.365 | 5.403 | VV | 434 | 5864 | 0.06% | 0.018% |
| 38 | 5.410 | 5.403 | 5.430 | VV | 333 | 3659 | 0.04% | 0.011% |
| 39 | 5.438 | 5.430 | 5.445 | VV | 297 | 1848 | 0.02% | 0.006% |
| 40 | 5.469 | 5.445 | 5.512 | VV | 748 | 14233 | 0.15% | 0.043% |
| 41 | 5.521 | 5.512 | 5.542 | VV | 385 | 5247 | 0.06% | 0.016% |
| 42 | 5.584 | 5.542 | 5.589 | VV | 370 | 6739 | 0.07% | 0.020% |
| 43 | 5.592 | 5.589 | 5.602 | VV | 273 | 1281 | 0.01% | 0.004% |
| 44 | 5.607 | 5.602 | 5.617 | VV | 169 | 1138 | 0.01% | 0.003% |
| 45 | 5.635 | 5.617 | 5.640 | VV | 300 | 2149 | 0.02% | 0.007% |
| 46 | 5.654 | 5.640 | 5.671 | PV | 215 | 2050 | 0.02% | 0.006% |
| 47 | 5.686 | 5.671 | 5.710 | VV | 474 | 6608 | 0.07% | 0.020% |
| 48 | 5.729 | 5.710 | 5.752 | VV | 559 | 9655 | 0.10% | 0.029% |
| 49 | 5.755 | 5.752 | 5.758 | VV | 342 | 1251 | 0.01% | 0.004% |
| 50 | 5.775 | 5.758 | 5.796 | VV | 1120 | 14761 | 0.15% | 0.045% |
| 51 | 5.813 | 5.796 | 5.838 | VV | 2307 | 31900 | 0.33% | 0.097% |
| 52 | 5.871 | 5.838 | 5.902 | VV | 2021 | 36458 | 0.38% | 0.111% |
| 53 | 5.937 | 5.902 | 5.968 | VV | 1241 | 30091 | 0.32% | 0.091% |
| 54 | 5.975 | 5.968 | 5.987 | VV | 353 | 3294 | 0.03% | 0.010% |
| 55 | 5.996 | 5.987 | 6.002 | VV | 385 | 2940 | 0.03% | 0.009% |
| 56 | 6.014 | 6.002 | 6.030 | VV | 381 | 4429 | 0.05% | 0.013% |
| 57 | 6.043 | 6.030 | 6.048 | VV | 338 | 2684 | 0.03% | 0.008% |
| 58 | 6.053 | 6.048 | 6.080 | VV | 332 | 4363 | 0.05% | 0.013% |
| 59 | 6.099 | 6.080 | 6.105 | VV | 588 | 6174 | 0.06% | 0.019% |
| 60 | 6.110 | 6.105 | 6.119 | VV | 604 | 4056 | 0.04% | 0.012% |
| 61 | 6.125 | 6.119 | 6.131 | VV | 484 | 3715 | 0.04% | 0.011% |
| 62 | 6.152 | 6.131 | 6.198 | VV | 3342 | 56942 | 0.60% | 0.173% |
| 63 | 6.221 | 6.198 | 6.247 | VV | 1875 | 26162 | 0.27% | 0.079% |
| 64 | 6.262 | 6.247 | 6.276 | VV | 1211 | 13244 | 0.14% | 0.040% |
| 65 | 6.292 | 6.276 | 6.314 | VV | 3270 | 40884 | 0.43% | 0.124% |
| 66 | 6.328 | 6.314 | 6.348 | VV | 1008 | 13995 | 0.15% | 0.042% |
| 67 | 6.367 | 6.348 | 6.405 | VV | 1932 | 24475 | 0.26% | 0.074% |
| 68 | 6.409 | 6.405 | 6.437 | VV | 224 | 3136 | 0.03% | 0.010% |
| 69 | 6.443 | 6.437 | 6.467 | VV | 226 | 2069 | 0.02% | 0.006% |
| 70 | 6.477 | 6.467 | 6.493 | VV | 203 | 2120 | 0.02% | 0.006% |
| 71 | 6.508 | 6.493 | 6.524 | VV | 467 | 4227 | 0.04% | 0.013% |
| 72 | 6.549 | 6.539 | 6.558 | VV | 263 | 2262 | 0.02% | 0.007% |
| 73 | 6.580 | 6.558 | 6.610 | VV | 2066 | 24942 | 0.26% | 0.076% |
| 74 | 6.629 | 6.610 | 6.639 | VV | 1666 | 18779 | 0.20% | 0.057% |
| 75 | 6.642 | 6.639 | 6.653 | VV | 1456 | 11005 | 0.12% | 0.033% |
| 76 | 6.664 | 6.653 | 6.668 | VV | 1521 | 12489 | 0.13% | 0.038% |
| 77 | 6.679 | 6.668 | 6.693 | VV | 2219 | 24604 | 0.26% | 0.075% |
| 78 | 6.702 | 6.693 | 6.731 | VV | 1712 | 22425 | 0.24% | 0.068% |
| 79 | 6.757 | 6.731 | 6.807 | VV | 3560 | 53843 | 0.56% | 0.163% |
| 80 | 6.833 | 6.807 | 6.844 | VV | 543 | 9065 | 0.10% | 0.028% |
| 81 | 6.857 | 6.844 | 6.882 | VV | 612 | 7924 | 0.08% | 0.024% |
| 82 | 6.914 | 6.882 | 6.957 | PV | 7942 | 89550 | 0.94% | 0.272% |
| 83 | 6.987 | 6.957 | 7.009 | VV | 1284 | 26387 | 0.28% | 0.080% |
| 84 | 7.025 | 7.009 | 7.037 | VV | 1508 | 18017 | 0.19% | 0.055% |
| 85 | 7.061 | 7.037 | 7.100 | VV | 1838 | 36649 | 0.38% | 0.111% |
| 86 | 7.115 | 7.100 | 7.133 | VV | 1066 | 14714 | 0.15% | 0.045% |
| 87 | 7.145 | 7.133 | 7.184 | VV | 1496 | 16267 | 0.17% | 0.049% |
| 88 | 7.210 | 7.184 | 7.237 | VV | 303 | 4555 | 0.05% | 0.014% |
| 89 | 7.266 | 7.237 | 7.272 | PV | 283 | 3945 | 0.04% | 0.012% |

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|---|---|---|---|---|---|---|---|---|
| 90 | 7.276 | 7.272 | 7.286 | VV | 315 | 1765 | 0.02% | 0.005% |
| 91 | 7.314 | 7.286 | 7.328 | VV | 2598 | 29397 | 0.31% | 0.089% |
| 92 | 7.352 | 7.328 | 7.508 | VV | 933500 | 9531207 | 100.00% | 28.933% |
| 93 | 7.523 | 7.508 | 7.535 | VV | 1343 | 20208 | 0.21% | 0.061% |
| 94 | 7.545 | 7.535 | 7.549 | VV | 1162 | 9231 | 0.10% | 0.028% |
| 95 | 7.555 | 7.549 | 7.570 | VV | 1153 | 13383 | 0.14% | 0.041% |
| 96 | 7.581 | 7.570 | 7.605 | VV | 1316 | 20440 | 0.21% | 0.062% |
| 97 | 7.623 | 7.605 | 7.656 | VV | 1904 | 29524 | 0.31% | 0.090% |
| 98 | 7.684 | 7.656 | 7.700 | VV | 448 | 9634 | 0.10% | 0.029% |
| 99 | 7.718 | 7.700 | 7.735 | VV | 795 | 12846 | 0.13% | 0.039% |
| 100 | 7.742 | 7.735 | 7.767 | VV | 511 | 6571 | 0.07% | 0.020% |
| 101 | 7.772 | 7.767 | 7.790 | VV | 327 | 3246 | 0.03% | 0.010% |
| 102 | 7.798 | 7.790 | 7.815 | VV | 329 | 3668 | 0.04% | 0.011% |
| 103 | 7.834 | 7.815 | 7.851 | VV | 577 | 8567 | 0.09% | 0.026% |
| 104 | 7.867 | 7.851 | 7.900 | VV | 576 | 12349 | 0.13% | 0.037% |
| 105 | 7.920 | 7.900 | 7.943 | VV | 4028 | 47882 | 0.50% | 0.145% |
| 106 | 7.950 | 7.943 | 7.960 | VV | 862 | 6552 | 0.07% | 0.020% |
| 107 | 7.968 | 7.960 | 7.993 | VV | 423 | 4889 | 0.05% | 0.015% |
| 108 | 8.014 | 7.993 | 8.022 | VV | 1133 | 12304 | 0.13% | 0.037% |
| 109 | 8.034 | 8.022 | 8.051 | VV | 1242 | 17172 | 0.18% | 0.052% |
| 110 | 8.067 | 8.051 | 8.090 | VV | 1253 | 17197 | 0.18% | 0.052% |
| 111 | 8.113 | 8.090 | 8.127 | VV | 1237 | 14690 | 0.15% | 0.045% |
| 112 | 8.146 | 8.127 | 8.171 | VV | 1196 | 16571 | 0.17% | 0.050% |
| 113 | 8.201 | 8.171 | 8.364 | VV | 498377 | 6310065 | 66.20% | 19.155% |
| 114 | 8.374 | 8.364 | 8.403 | VV | 3494 | 70425 | 0.74% | 0.214% |
| 115 | 8.411 | 8.403 | 8.438 | VV | 2528 | 48166 | 0.51% | 0.146% |
| 116 | 8.457 | 8.438 | 8.498 | VV | 3278 | 81266 | 0.85% | 0.247% |
| 117 | 8.513 | 8.498 | 8.550 | VV | 1568 | 34727 | 0.36% | 0.105% |
| 118 | 8.565 | 8.550 | 8.602 | VV | 1295 | 28440 | 0.30% | 0.086% |
| 119 | 8.635 | 8.602 | 8.714 | VV | 85909 | 973003 | 10.21% | 2.954% |
| 120 | 8.745 | 8.714 | 8.790 | VV | 6843 | 130794 | 1.37% | 0.397% |
| 121 | 8.793 | 8.790 | 8.805 | VV | 660 | 5209 | 0.05% | 0.016% |
| 122 | 8.824 | 8.805 | 8.850 | VV | 2005 | 35443 | 0.37% | 0.108% |
| 123 | 8.871 | 8.850 | 8.902 | VV | 1233 | 24921 | 0.26% | 0.076% |
| 124 | 8.933 | 8.902 | 8.942 | VV | 857 | 15841 | 0.17% | 0.048% |
| 125 | 8.946 | 8.942 | 8.973 | VV | 826 | 11091 | 0.12% | 0.034% |
| 126 | 8.977 | 8.973 | 8.980 | VV | 460 | 1690 | 0.02% | 0.005% |
| 127 | 8.991 | 8.980 | 9.003 | VV | 686 | 7984 | 0.08% | 0.024% |
| 128 | 9.017 | 9.003 | 9.034 | VV | 1080 | 15177 | 0.16% | 0.046% |
| 129 | 9.038 | 9.034 | 9.073 | VV | 847 | 11058 | 0.12% | 0.034% |
| 130 | 9.094 | 9.073 | 9.149 | VV | 1871 | 32445 | 0.34% | 0.098% |
| 131 | 9.181 | 9.149 | 9.192 | VV | 676 | 9155 | 0.10% | 0.028% |
| 132 | 9.198 | 9.192 | 9.215 | VV | 468 | 4861 | 0.05% | 0.015% |
| 133 | 9.239 | 9.215 | 9.271 | VV | 1111 | 16385 | 0.17% | 0.050% |
| 134 | 9.300 | 9.271 | 9.338 | VV | 685 | 14195 | 0.15% | 0.043% |
| 135 | 9.349 | 9.338 | 9.357 | VV | 483 | 4827 | 0.05% | 0.015% |
| 136 | 9.359 | 9.357 | 9.368 | VV | 580 | 2734 | 0.03% | 0.008% |
| 137 | 9.387 | 9.368 | 9.498 | VV | 17533 | 480926 | 5.05% | 1.460% |
| 138 | 9.514 | 9.498 | 9.563 | VV | 3267 | 69253 | 0.73% | 0.210% |
| 139 | 9.589 | 9.563 | 9.635 | VV | 1444 | 48096 | 0.50% | 0.146% |
| 140 | 9.643 | 9.635 | 9.650 | VV | 795 | 5793 | 0.06% | 0.018% |
| 141 | 9.656 | 9.650 | 9.673 | VV | 715 | 7591 | 0.08% | 0.023% |

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|---|---|---|---|---|---|---|---|---|
| 142 | 9.687 | 9.673 | 9.706 | VV | 619 | 8422 | 0.09% | 0.026% |
| 143 | 9.713 | 9.706 | 9.729 | VV | 387 | 3816 | 0.04% | 0.012% |
| 144 | 9.735 | 9.729 | 9.740 | VV | 303 | 1577 | 0.02% | 0.005% |
| 145 | 9.752 | 9.740 | 9.763 | VV | 433 | 4263 | 0.04% | 0.013% |
| 146 | 9.779 | 9.763 | 9.795 | VV | 611 | 9709 | 0.10% | 0.029% |
| 147 | 9.823 | 9.795 | 9.850 | VV | 1351 | 25145 | 0.26% | 0.076% |
| 148 | 9.903 | 9.850 | 9.920 | VV | 1050 | 29525 | 0.31% | 0.090% |
| 149 | 9.936 | 9.920 | 9.942 | VV | 1067 | 11961 | 0.13% | 0.036% |
| 150 | 9.949 | 9.942 | 9.959 | VV | 898 | 8107 | 0.09% | 0.025% |
| 151 | 9.966 | 9.959 | 9.977 | VV | 827 | 7589 | 0.08% | 0.023% |
| 152 | 9.989 | 9.977 | 9.996 | VV | 861 | 8183 | 0.09% | 0.025% |
| 153 | 10.011 | 9.996 | 10.032 | VV | 1586 | 21587 | 0.23% | 0.066% |
| 154 | 10.054 | 10.032 | 10.070 | VV | 575 | 11227 | 0.12% | 0.034% |
| 155 | 10.099 | 10.070 | 10.118 | VV | 1165 | 20761 | 0.22% | 0.063% |
| 156 | 10.132 | 10.118 | 10.158 | VV | 956 | 16755 | 0.18% | 0.051% |
| 157 | 10.186 | 10.158 | 10.207 | VV | 1460 | 26956 | 0.28% | 0.082% |
| 158 | 10.251 | 10.207 | 10.281 | VV | 2061 | 45733 | 0.48% | 0.139% |
| 159 | 10.294 | 10.281 | 10.317 | VV | 1061 | 16719 | 0.18% | 0.051% |
| 160 | 10.326 | 10.317 | 10.336 | VV | 1008 | 9262 | 0.10% | 0.028% |
| 161 | 10.362 | 10.336 | 10.387 | VV | 3134 | 49631 | 0.52% | 0.151% |
| 162 | 10.402 | 10.387 | 10.421 | VV | 849 | 13006 | 0.14% | 0.039% |
| 163 | 10.423 | 10.421 | 10.430 | VV | 608 | 3179 | 0.03% | 0.010% |
| 164 | 10.434 | 10.430 | 10.441 | VV | 655 | 3841 | 0.04% | 0.012% |
| 165 | 10.454 | 10.441 | 10.481 | VV | 791 | 15334 | 0.16% | 0.047% |
| 166 | 10.489 | 10.481 | 10.510 | VV | 537 | 6398 | 0.07% | 0.019% |
| 167 | 10.520 | 10.510 | 10.530 | VV | 509 | 5333 | 0.06% | 0.016% |
| 168 | 10.532 | 10.530 | 10.537 | VV | 609 | 1929 | 0.02% | 0.006% |
| 169 | 10.544 | 10.537 | 10.577 | VV | 619 | 12850 | 0.13% | 0.039% |
| 170 | 10.603 | 10.577 | 10.618 | VV | 621 | 11065 | 0.12% | 0.034% |
| 171 | 10.632 | 10.618 | 10.643 | VV | 690 | 8194 | 0.09% | 0.025% |
| 172 | 10.660 | 10.643 | 10.681 | VV | 1792 | 21991 | 0.23% | 0.067% |
| 173 | 10.703 | 10.681 | 10.722 | VV | 659 | 11676 | 0.12% | 0.035% |
| 174 | 10.726 | 10.722 | 10.743 | VV | 468 | 5396 | 0.06% | 0.016% |
| 175 | 10.750 | 10.743 | 10.800 | VV | 499 | 11767 | 0.12% | 0.036% |
| 176 | 10.810 | 10.800 | 10.828 | VV | 394 | 4118 | 0.04% | 0.012% |
| 177 | 10.877 | 10.828 | 10.915 | VV | 1180 | 25036 | 0.26% | 0.076% |
| 178 | 10.944 | 10.915 | 10.975 | VV | 2314 | 36661 | 0.38% | 0.111% |
| 179 | 10.986 | 10.975 | 10.992 | VV | 748 | 6536 | 0.07% | 0.020% |
| 180 | 10.997 | 10.992 | 11.008 | VV | 733 | 6283 | 0.07% | 0.019% |
| 181 | 11.029 | 11.008 | 11.062 | VV | 1441 | 27229 | 0.29% | 0.083% |
| 182 | 11.067 | 11.062 | 11.072 | VV | 434 | 1981 | 0.02% | 0.006% |
| 183 | 11.086 | 11.072 | 11.120 | VV | 531 | 9219 | 0.10% | 0.028% |
| 184 | 11.149 | 11.120 | 11.173 | VV | 643 | 14084 | 0.15% | 0.043% |
| 185 | 11.185 | 11.173 | 11.193 | VV | 416 | 3537 | 0.04% | 0.011% |
| 186 | 11.235 | 11.203 | 11.309 | PV | 611603 | 6634678 | 69.61% | 20.140% |
| 187 | 11.319 | 11.309 | 11.379 | VV | 1918 | 50938 | 0.53% | 0.155% |
| 188 | 11.408 | 11.379 | 11.451 | VV | 2256 | 47656 | 0.50% | 0.145% |
| 189 | 11.454 | 11.451 | 11.464 | VV | 463 | 3026 | 0.03% | 0.009% |
| 190 | 11.485 | 11.464 | 11.490 | VV | 581 | 6615 | 0.07% | 0.020% |
| 191 | 11.507 | 11.490 | 11.512 | VV | 811 | 8601 | 0.09% | 0.026% |
| 192 | 11.517 | 11.512 | 11.541 | VV | 964 | 13676 | 0.14% | 0.042% |
| 193 | 11.568 | 11.541 | 11.578 | VV | 1368 | 24030 | 0.25% | 0.073% |
| 194 | 11.592 | 11.578 | 11.614 | VV | 1483 | 25576 | 0.27% | 0.078% |

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|---|---|---|---|---|---|---|---|---|
| 195 | 11.620 | 11.614 | 11.630 | VV | 977 | 9584 | 0.10% | 0.029% |
| 196 | 11.665 | 11.630 | 11.709 | VV | 8833 | 144453 | 1.52% | 0.439% |
| 197 | 11.714 | 11.709 | 11.719 | VV | 682 | 3462 | 0.04% | 0.011% |
| 198 | 11.737 | 11.719 | 11.744 | VV | 1051 | 13461 | 0.14% | 0.041% |
| 199 | 11.755 | 11.744 | 11.782 | VV | 1117 | 21274 | 0.22% | 0.065% |
| 200 | 11.814 | 11.782 | 11.838 | VV | 2399 | 51652 | 0.54% | 0.157% |
| 201 | 11.860 | 11.838 | 11.924 | VV | 29643 | 485938 | 5.10% | 1.475% |
| 202 | 11.937 | 11.924 | 11.970 | VV | 2701 | 57833 | 0.61% | 0.176% |
| 203 | 11.974 | 11.970 | 12.000 | VV | 1714 | 27242 | 0.29% | 0.083% |
| 204 | 12.021 | 12.000 | 12.058 | VV | 1617 | 45337 | 0.48% | 0.138% |
| 205 | 12.102 | 12.058 | 12.131 | VV | 9188 | 144404 | 1.52% | 0.438% |
| 206 | 12.149 | 12.131 | 12.158 | VV | 1128 | 14852 | 0.16% | 0.045% |
| 207 | 12.178 | 12.158 | 12.218 | VV | 2008 | 39634 | 0.42% | 0.120% |
| 208 | 12.241 | 12.218 | 12.276 | VV | 2620 | 42203 | 0.44% | 0.128% |
| 209 | 12.307 | 12.276 | 12.370 | VV | 11539 | 168353 | 1.77% | 0.511% |
| 210 | 12.376 | 12.370 | 12.384 | VV | 611 | 4322 | 0.05% | 0.013% |
| 211 | 12.391 | 12.384 | 12.396 | VV | 544 | 3339 | 0.04% | 0.010% |
| 212 | 12.404 | 12.396 | 12.414 | VV | 476 | 4471 | 0.05% | 0.014% |
| 213 | 12.418 | 12.414 | 12.427 | VV | 425 | 2400 | 0.03% | 0.007% |
| 214 | 12.431 | 12.427 | 12.465 | VV | 363 | 6442 | 0.07% | 0.020% |
| 215 | 12.508 | 12.465 | 12.520 | VV | 727 | 16507 | 0.17% | 0.050% |
| 216 | 12.529 | 12.520 | 12.549 | VV | 609 | 8985 | 0.09% | 0.027% |
| 217 | 12.562 | 12.549 | 12.585 | VV | 544 | 9711 | 0.10% | 0.029% |
| 218 | 12.677 | 12.585 | 12.721 | VV | 134015 | 1659499 | 17.41% | 5.038% |
| 219 | 12.736 | 12.721 | 12.765 | VV | 1365 | 28716 | 0.30% | 0.087% |
| 220 | 12.779 | 12.765 | 12.789 | VV | 739 | 8853 | 0.09% | 0.027% |
| 221 | 12.806 | 12.789 | 12.820 | VV | 714 | 11552 | 0.12% | 0.035% |
| 222 | 12.821 | 12.820 | 12.826 | VV | 634 | 1957 | 0.02% | 0.006% |
| 223 | 12.850 | 12.826 | 12.858 | VV | 945 | 16417 | 0.17% | 0.050% |
| 224 | 12.862 | 12.858 | 12.879 | VV | 968 | 10831 | 0.11% | 0.033% |
| 225 | 12.912 | 12.879 | 12.952 | VV | 5722 | 99253 | 1.04% | 0.301% |
| 226 | 12.984 | 12.952 | 13.021 | VV | 861 | 31946 | 0.34% | 0.097% |
| 227 | 13.040 | 13.021 | 13.071 | VV | 1254 | 30443 | 0.32% | 0.092% |
| 228 | 13.092 | 13.071 | 13.237 | VV | 8209 | 245110 | 2.57% | 0.744% |
| 229 | 13.242 | 13.237 | 13.245 | VV | 954 | 4354 | 0.05% | 0.013% |
| 230 | 13.264 | 13.245 | 13.287 | VV | 1145 | 24689 | 0.26% | 0.075% |
| 231 | 13.298 | 13.287 | 13.323 | VV | 962 | 19058 | 0.20% | 0.058% |
| 232 | 13.330 | 13.323 | 13.349 | VV | 803 | 10570 | 0.11% | 0.032% |
| 233 | 13.390 | 13.349 | 13.412 | VV | 2125 | 51292 | 0.54% | 0.156% |
| 234 | 13.431 | 13.412 | 13.462 | VV | 2597 | 38092 | 0.40% | 0.116% |
| 235 | 13.471 | 13.462 | 13.480 | VV | 500 | 4687 | 0.05% | 0.014% |
| 236 | 13.491 | 13.480 | 13.503 | VV | 530 | 6452 | 0.07% | 0.020% |
| 237 | 13.507 | 13.503 | 13.518 | VV | 365 | 2968 | 0.03% | 0.009% |
| 238 | 13.525 | 13.518 | 13.530 | VV | 453 | 2332 | 0.02% | 0.007% |
| 239 | 13.538 | 13.530 | 13.559 | VV | 522 | 5982 | 0.06% | 0.018% |
| 240 | 13.565 | 13.559 | 13.579 | VV | 281 | 2663 | 0.03% | 0.008% |
| 241 | 13.600 | 13.579 | 13.617 | VV | 342 | 3655 | 0.04% | 0.011% |
| 242 | 13.636 | 13.617 | 13.643 | VV | 347 | 4068 | 0.04% | 0.012% |
| 243 | 13.653 | 13.643 | 13.658 | VV | 399 | 2820 | 0.03% | 0.009% |
| 244 | 13.673 | 13.658 | 13.689 | VV | 403 | 6017 | 0.06% | 0.018% |
| 245 | 13.695 | 13.689 | 13.705 | VV | 415 | 2782 | 0.03% | 0.008% |
| 246 | 13.732 | 13.705 | 13.741 | VV | 458 | 6070 | 0.06% | 0.018% |

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|---|---|---|---|---|---|---|---|---|
| 247 | 13.759 | 13.741 | 13.784 | VV | 474 | 8104 | 0.09% | 0.025% |
| 248 | 13.799 | 13.784 | 13.806 | VV | 363 | 3724 | 0.04% | 0.011% |
| 249 | 13.814 | 13.806 | 13.826 | VV | 440 | 4559 | 0.05% | 0.014% |
| 250 | 13.884 | 13.826 | 13.915 | VV | 1604 | 42530 | 0.45% | 0.129% |
| 251 | 13.919 | 13.915 | 13.935 | VV | 663 | 6848 | 0.07% | 0.021% |
| 252 | 13.944 | 13.935 | 13.960 | VV | 599 | 8097 | 0.08% | 0.025% |
| 253 | 13.965 | 13.960 | 13.970 | VV | 529 | 2782 | 0.03% | 0.008% |
| 254 | 13.989 | 13.970 | 13.994 | VV | 582 | 7052 | 0.07% | 0.021% |
| 255 | 13.998 | 13.994 | 14.012 | VV | 550 | 4864 | 0.05% | 0.015% |
| 256 | 14.017 | 14.012 | 14.033 | VV | 424 | 4495 | 0.05% | 0.014% |
| 257 | 14.048 | 14.033 | 14.074 | VV | 682 | 12927 | 0.14% | 0.039% |
| 258 | 14.079 | 14.074 | 14.082 | VV | 623 | 2622 | 0.03% | 0.008% |
| 259 | 14.089 | 14.082 | 14.100 | VV | 702 | 5899 | 0.06% | 0.018% |
| 260 | 14.104 | 14.100 | 14.110 | VV | 667 | 3472 | 0.04% | 0.011% |
| 261 | 14.118 | 14.110 | 14.145 | VV | 746 | 12287 | 0.13% | 0.037% |
| 262 | 14.150 | 14.145 | 14.182 | VV | 744 | 13923 | 0.15% | 0.042% |
| 263 | 14.200 | 14.182 | 14.209 | VV | 721 | 10262 | 0.11% | 0.031% |
| 264 | 14.220 | 14.209 | 14.224 | VV | 618 | 4881 | 0.05% | 0.015% |
| 265 | 14.227 | 14.224 | 14.230 | VV | 579 | 1855 | 0.02% | 0.006% |
| 266 | 14.240 | 14.230 | 14.263 | VV | 811 | 11448 | 0.12% | 0.035% |
| 267 | 14.276 | 14.263 | 14.280 | VV | 589 | 4886 | 0.05% | 0.015% |
| 268 | 14.294 | 14.280 | 14.314 | VV | 880 | 14984 | 0.16% | 0.045% |
| 269 | 14.319 | 14.314 | 14.321 | VV | 636 | 2621 | 0.03% | 0.008% |
| 270 | 14.336 | 14.321 | 14.360 | VV | 824 | 15057 | 0.16% | 0.046% |
| 271 | 14.377 | 14.360 | 14.387 | VV | 845 | 10026 | 0.11% | 0.030% |
| 272 | 14.391 | 14.387 | 14.418 | VV | 720 | 9131 | 0.10% | 0.028% |
| 273 | 14.424 | 14.418 | 14.433 | VV | 430 | 3332 | 0.03% | 0.010% |
| 274 | 14.438 | 14.433 | 14.445 | VV | 391 | 2315 | 0.02% | 0.007% |
| 275 | 14.460 | 14.445 | 14.466 | VV | 526 | 5138 | 0.05% | 0.016% |
| 276 | 14.488 | 14.466 | 14.515 | VV | 1731 | 35849 | 0.38% | 0.109% |
| 277 | 14.529 | 14.515 | 14.568 | VV | 2402 | 37995 | 0.40% | 0.115% |
| 278 | 14.587 | 14.568 | 14.620 | VV | 1174 | 17747 | 0.19% | 0.054% |
| 279 | 14.623 | 14.620 | 14.632 | VV | 222 | 1399 | 0.01% | 0.004% |
| 280 | 14.647 | 14.632 | 14.673 | VV | 335 | 4941 | 0.05% | 0.015% |
| 281 | 14.694 | 14.673 | 14.743 | VV | 1083 | 19017 | 0.20% | 0.058% |
| 282 | 14.753 | 14.743 | 14.769 | VV | 361 | 3987 | 0.04% | 0.012% |
| 283 | 14.776 | 14.769 | 14.782 | VV | 272 | 1554 | 0.02% | 0.005% |
| 284 | 14.787 | 14.782 | 14.791 | VV | 287 | 1126 | 0.01% | 0.003% |
| 285 | 14.800 | 14.791 | 14.808 | VV | 384 | 2527 | 0.03% | 0.008% |
| 286 | 14.825 | 14.808 | 14.850 | VV | 462 | 8316 | 0.09% | 0.025% |
| 287 | 14.855 | 14.850 | 14.876 | VV | 399 | 3511 | 0.04% | 0.011% |
| 288 | 14.909 | 14.876 | 14.978 | VV | 9008 | 200942 | 2.11% | 0.610% |
| 289 | 14.989 | 14.978 | 15.028 | VV | 1548 | 35527 | 0.37% | 0.108% |
| 290 | 15.066 | 15.028 | 15.131 | VV | 3470 | 79192 | 0.83% | 0.240% |
| 291 | 15.136 | 15.131 | 15.146 | VV | 384 | 2984 | 0.03% | 0.009% |
| 292 | 15.173 | 15.146 | 15.213 | VV | 700 | 19087 | 0.20% | 0.058% |
| 293 | 15.238 | 15.213 | 15.257 | VV | 1108 | 19724 | 0.21% | 0.060% |
| 294 | 15.259 | 15.257 | 15.272 | VV | 844 | 4911 | 0.05% | 0.015% |
| 295 | 15.278 | 15.272 | 15.290 | VV | 429 | 3505 | 0.04% | 0.011% |
| 296 | 15.301 | 15.290 | 15.318 | VV | 381 | 4214 | 0.04% | 0.013% |
| 297 | 15.332 | 15.318 | 15.347 | VV | 495 | 6967 | 0.07% | 0.021% |
| 298 | 15.354 | 15.347 | 15.360 | VV | 671 | 4503 | 0.05% | 0.014% |
| 299 | 15.365 | 15.360 | 15.410 | VV | 722 | 17578 | 0.18% | 0.053% |

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|---|---|---|---|---|---|---|---|---|
| 300 | 15.431 | 15.410 | 15.450 | VV | 732 | 14067 | 0.15% | 0.043% |
| 301 | 15.455 | 15.450 | 15.465 | VV | 616 | 4042 | 0.04% | 0.012% |
| 302 | 15.506 | 15.465 | 15.523 | VV | 1263 | 24630 | 0.26% | 0.075% |
| 303 | 15.544 | 15.523 | 15.575 | VV | 2100 | 34169 | 0.36% | 0.104% |
| 304 | 15.580 | 15.575 | 15.642 | VV | 583 | 15031 | 0.16% | 0.046% |
| 305 | 15.647 | 15.642 | 15.683 | VV | 201 | 1332 | 0.01% | 0.004% |
| 306 | 15.728 | 15.688 | 15.739 | VV | 285 | 4548 | 0.05% | 0.014% |
| 307 | 15.747 | 15.739 | 15.776 | VV | 269 | 3932 | 0.04% | 0.012% |
| 308 | 15.784 | 15.776 | 15.792 | VV | 298 | 1337 | 0.01% | 0.004% |
| 309 | 15.798 | 15.792 | 15.812 | VV | 212 | 1833 | 0.02% | 0.006% |
| 310 | 15.824 | 15.812 | 15.830 | VV | 271 | 1528 | 0.02% | 0.005% |
| 311 | 15.839 | 15.830 | 15.845 | VV | 230 | 1130 | 0.01% | 0.003% |
| 312 | 15.850 | 15.845 | 15.879 | VV | 235 | 1961 | 0.02% | 0.006% |
| 313 | 15.924 | 15.888 | 15.930 | VV | 1070 | 13536 | 0.14% | 0.041% |
| 314 | 15.932 | 15.930 | 15.962 | VV | 1038 | 14198 | 0.15% | 0.043% |
| 315 | 15.980 | 15.962 | 15.986 | VV | 759 | 8516 | 0.09% | 0.026% |
| 316 | 15.989 | 15.986 | 16.005 | VV | 715 | 5989 | 0.06% | 0.018% |
| 317 | 16.025 | 16.005 | 16.054 | VV | 1089 | 18023 | 0.19% | 0.055% |
| 318 | 16.066 | 16.054 | 16.070 | VV | 309 | 2486 | 0.03% | 0.008% |
| 319 | 16.117 | 16.070 | 16.164 | VV | 1497 | 37740 | 0.40% | 0.115% |
| 320 | 16.169 | 16.164 | 16.172 | VV | 360 | 1627 | 0.02% | 0.005% |
| 321 | 16.185 | 16.172 | 16.192 | VV | 548 | 4482 | 0.05% | 0.014% |
| 322 | 16.195 | 16.192 | 16.199 | VV | 440 | 1417 | 0.01% | 0.004% |
| 323 | 16.202 | 16.199 | 16.211 | VV | 440 | 3034 | 0.03% | 0.009% |
| 324 | 16.242 | 16.211 | 16.272 | VV | 753 | 22248 | 0.23% | 0.068% |
| 325 | 16.276 | 16.272 | 16.293 | VV | 782 | 7127 | 0.07% | 0.022% |
| 326 | 16.315 | 16.293 | 16.330 | VV | 591 | 9779 | 0.10% | 0.030% |
| 327 | 16.334 | 16.330 | 16.347 | VV | 510 | 4408 | 0.05% | 0.013% |
| 328 | 16.354 | 16.347 | 16.360 | VV | 512 | 3719 | 0.04% | 0.011% |
| 329 | 16.386 | 16.360 | 16.391 | VV | 819 | 12519 | 0.13% | 0.038% |
| 330 | 16.406 | 16.391 | 16.427 | VV | 944 | 15155 | 0.16% | 0.046% |
| 331 | 16.433 | 16.427 | 16.435 | VV | 551 | 2391 | 0.03% | 0.007% |
| 332 | 16.456 | 16.435 | 16.467 | VV | 1638 | 22619 | 0.24% | 0.069% |
| 333 | 16.488 | 16.467 | 16.507 | VV | 2834 | 45557 | 0.48% | 0.138% |
| 334 | 16.530 | 16.507 | 16.567 | VV | 7908 | 115522 | 1.21% | 0.351% |
| 335 | 16.574 | 16.567 | 16.600 | VV | 830 | 11694 | 0.12% | 0.035% |
| 336 | 16.603 | 16.600 | 16.616 | VV | 468 | 3367 | 0.04% | 0.010% |
| 337 | 16.621 | 16.616 | 16.636 | VV | 368 | 3476 | 0.04% | 0.011% |
| 338 | 16.646 | 16.636 | 16.651 | VV | 432 | 2905 | 0.03% | 0.009% |
| 339 | 16.658 | 16.651 | 16.682 | VV | 479 | 5118 | 0.05% | 0.016% |
| 340 | 16.715 | 16.682 | 16.724 | PV | 293 | 4691 | 0.05% | 0.014% |
| 341 | 16.734 | 16.724 | 16.755 | VV | 333 | 3268 | 0.03% | 0.010% |
| 342 | 16.802 | 16.755 | 16.836 | VV | 1035 | 24823 | 0.26% | 0.075% |
| 343 | 16.859 | 16.836 | 16.891 | VV | 875 | 18562 | 0.19% | 0.056% |
| 344 | 16.903 | 16.891 | 16.909 | VV | 619 | 5755 | 0.06% | 0.017% |
| 345 | 16.937 | 16.909 | 16.973 | VV | 3107 | 51268 | 0.54% | 0.156% |
| 346 | 16.976 | 16.973 | 16.999 | VV | 476 | 4430 | 0.05% | 0.013% |
| 347 | 17.004 | 16.999 | 17.012 | VV | 291 | 1639 | 0.02% | 0.005% |
| 348 | 17.042 | 17.012 | 17.066 | VV | 487 | 11528 | 0.12% | 0.035% |
| 349 | 17.072 | 17.066 | 17.080 | VV | 352 | 2571 | 0.03% | 0.008% |
| 350 | 17.086 | 17.080 | 17.114 | VV | 470 | 6563 | 0.07% | 0.020% |
| 351 | 17.121 | 17.114 | 17.147 | VV | 416 | 6372 | 0.07% | 0.019% |

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| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 352 | 17.179 | 17.147 | 17.199 | VV | 538 | 12364 | 0.13% | 0.038% |
| 353 | 17.204 | 17.199 | 17.234 | VV | 392 | 6260 | 0.07% | 0.019% |
| 354 | 17.239 | 17.234 | 17.243 | VV | 273 | 1380 | 0.01% | 0.004% |
| 355 | 17.249 | 17.243 | 17.252 | VV | 343 | 1583 | 0.02% | 0.005% |
| 356 | 17.255 | 17.252 | 17.268 | VV | 350 | 2702 | 0.03% | 0.008% |
| 357 | 17.274 | 17.268 | 17.282 | VV | 420 | 2558 | 0.03% | 0.008% |
| 358 | 17.299 | 17.282 | 17.303 | VV | 386 | 3904 | 0.04% | 0.012% |
| 359 | 17.311 | 17.303 | 17.321 | VV | 518 | 4726 | 0.05% | 0.014% |
| 360 | 17.341 | 17.321 | 17.348 | VV | 1502 | 16598 | 0.17% | 0.050% |
| 361 | 17.370 | 17.348 | 17.399 | VV | 4368 | 67221 | 0.71% | 0.204% |
| 362 | 17.404 | 17.399 | 17.411 | VV | 507 | 2366 | 0.02% | 0.007% |
| 363 | 17.417 | 17.411 | 17.430 | VV | 408 | 3232 | 0.03% | 0.010% |
| 364 | 17.463 | 17.430 | 17.499 | VV | 2635 | 45025 | 0.47% | 0.137% |
| 365 | 17.504 | 17.499 | 17.514 | VV | 369 | 2878 | 0.03% | 0.009% |
| 366 | 17.522 | 17.514 | 17.543 | VV | 431 | 4865 | 0.05% | 0.015% |
| 367 | 17.569 | 17.554 | 17.580 | VV | 421 | 3776 | 0.04% | 0.011% |
| 368 | 17.583 | 17.580 | 17.592 | VV | 325 | 1828 | 0.02% | 0.006% |
| 369 | 17.594 | 17.592 | 17.610 | VV | 304 | 1294 | 0.01% | 0.004% |
| 370 | 17.620 | 17.610 | 17.635 | PV | 166 | 1841 | 0.02% | 0.006% |
| 371 | 17.665 | 17.635 | 17.681 | VV | 900 | 13142 | 0.14% | 0.040% |
| 372 | 17.684 | 17.681 | 17.698 | VV | 369 | 2174 | 0.02% | 0.007% |
| 373 | 17.728 | 17.698 | 17.767 | VV | 7595 | 142090 | 1.49% | 0.431% |
| 374 | 17.790 | 17.767 | 17.869 | VV | 4964 | 94678 | 0.99% | 0.287% |
| 375 | 17.894 | 17.869 | 17.929 | VV | 731 | 14540 | 0.15% | 0.044% |
| 376 | 17.934 | 17.929 | 17.949 | VV | 451 | 3342 | 0.04% | 0.010% |
| 377 | 17.957 | 17.949 | 17.975 | VV | 266 | 1894 | 0.02% | 0.006% |
| 378 | 18.000 | 17.975 | 18.027 | PV | 460 | 7467 | 0.08% | 0.023% |
| 379 | 18.056 | 18.027 | 18.080 | PV | 466 | 7463 | 0.08% | 0.023% |
| 380 | 18.096 | 18.080 | 18.112 | VV | 273 | 2462 | 0.03% | 0.007% |
| 381 | 18.199 | 18.112 | 18.273 | PV | 4701 | 102686 | 1.08% | 0.312% |

Sum of corrected areas: 32942614

Aromatic EPH 021125.M Sat Mar 01 04:00:09 2025

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Weston Solutions, Inc. | Date Collected: | 02/24/25 |
| Project: | RFP 905 | Date Received: | 02/24/25 |
| Client Sample ID: | P001-CLAY-CF01-01 | SDG No.: | Q1421 |
| Lab Sample ID: | Q1421-04 | Matrix: | Water |
| Analytical Method: | NJEPH | % Solid: | 0 |
| Sample Wt/Vol: | 1000 Units: mL | Final Vol: | 2000 uL |
| Soil Aliquot Vol: | uL | Test: | EPH |
| Prep Method : | SW3510 | | |

| Prep Date : | Date Analyzed : | Prep Batch ID |
|---|---|---|
| 02/26/25 11:45 | 02/27/25 12:14 | PB166883 |

| CAS Number | Parameter | Conc. | Qualifier | Dilution | MDL | LOQ / CRQL | Units | Datafile |
|---|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | | |
| Aliphatic C9-C12 | Aliphatic C9-C12 | 5.76 | U | 1 | 5.76 | 30.0 | ug/l | FC068309.D |
| Aliphatic C12-C16 | Aliphatic C12-C16 | 8.76 | J | 1 | 3.61 | 20.0 | ug/l | FC068309.D |
| Aliphatic C16-C21 | Aliphatic C16-C21 | 5.14 | U | 1 | 5.14 | 30.0 | ug/l | FC068309.D |
| Aliphatic C21-C28 | Aliphatic C21-C28 | 8.97 | U | 1 | 8.97 | 40.0 | ug/l | FC068309.D |
| Aliphatic C28-C40 | Aliphatic C28-C40 | 60.6 | | 1 | 17.0 | 60.0 | ug/l | FC068309.D |
| Aromatic C10-C12 | Aromatic C10-C12 | 3.32 | U | 1 | 3.32 | 20.0 | ug/l | FD049118.D |
| Aromatic C12-C16 | Aromatic C12-C16 | 12.2 | J | 1 | 3.69 | 30.0 | ug/l | FD049118.D |
| Aromatic C16-C21 | Aromatic C16-C21 | 43.0 | J | 1 | 12.7 | 50.0 | ug/l | FD049118.D |
| Aromatic C21-C36 | Aromatic C21-C36 | 25.2 | U | 1 | 25.2 | 80.0 | ug/l | FD049118.D |
| Total AliphaticEPH | Total AliphaticEPH | 69.4 | J | | 40.5 | 180 | ug/l | |
| Total AromaticEPH | Total AromaticEPH | 55.2 | J | | 44.9 | 180 | ug/l | |
| Total EPH | Total EPH | 125 | J | | 85.4 | 360 | ug/l | |

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control 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

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Weston Solutions, Inc. | Date Collected: | 02/24/25 |
| Project: | RFP 905 | Date Received: | 02/24/25 |
| Client Sample ID: | P001-CLAY-CF01-01 | SDG No.: | Q1421 |
| Lab Sample ID: | Q1421-04 | Matrix: | Water |
| Analytical Method: | NJEPH | % Solid: | 0 |
| Sample Wt/Vol: | 1000 Units: mL | Final Vol: | 2000 uL |
| Soil Aliquot Vol: | uL | Test: | EPH |
| Prep Method : | SW3510 | | |

| File ID : | Dilution: | Prep Date : | Date Analyzed : | Prep Batch ID |
|---|---|---|---|---|
| FC068309.D | 1 | 02/26/25 | 02/27/25 | PB166883 |

| CAS Number | Parameter | | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | |
| Aliphatic C9-C12 | Aliphatic C9-C12 | | 5.76 | U | 5.76 | 30.0 | ug/l |
| Aliphatic C12-C16 | Aliphatic C12-C16 | | 8.76 | J | 3.61 | 20.0 | ug/l |
| Aliphatic C16-C21 | Aliphatic C16-C21 | | 5.14 | U | 5.14 | 30.0 | ug/l |
| Aliphatic C21-C28 | Aliphatic C21-C28 | | 8.97 | U | 8.97 | 40.0 | ug/l |
| Aliphatic C28-C40 | Aliphatic C28-C40 | | 60.6 | | 17.0 | 60.0 | ug/l |
| **SURROGATES** | | | | | | | |
| 3383-33-2 | 1-chlorooctadecane (SURR) | | 33.7 | | 40 - 140 | 67% | SPK: 50 |
| 84-15-1 | ortho-Terphenyl (SURR) | | 0.00 | | 40 - 140 | 0% | SPK: 50 |

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

# Quantitation Report For Aliphatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | Q1421-04 | Acq On: | 27 Feb 2025 12:14 |
| Client Sample ID: | P001-CLAY-CF01-01 | Operator: | YP/AJ |
| Data file: | FC068309.D | Misc: | |
| Instrument: | FID_C | ALS Vial: | 14 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aliphatic C9-C12 | 3.104 | 6.370 | 382899 | 2.715 | 300 | ug/ml |
| Aliphatic C12-C16 | 6.371 | 9.754 | 598377 | 4.379 | 200 | ug/ml |
| Aliphatic C16-C21 | 9.755 | 13.108 | 523617 | 3.978 | 300 | ug/ml |
| Aliphatic C21-C28 | 13.109 | 16.762 | 500495 | 4.079 | 400 | ug/ml |
| Aliphatic C28-C40 | 16.763 | 21.566 | 3118558 | 30.322 | 600 | ug/ml |
| Aliphatic EPH | 3.104 | 21.566 | 5123946 | 45.473 | | ug/ml |
| ortho-Terphenyl (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |
| 1-chlorooctadecane (SURR) | 12.840 | 12.840 | 3785768 | 33.66 | | ug/ml |
| Aliphatic C9-C28 | 3.104 | 16.762 | 2005388 | 15.151 | 1200 | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022725AL\
Data File : FC068309.D
Signal(s) : FID1A.ch
Acq On : 27 Feb 2025 12:14
Operator : YP/AJ
Sample : Q1421-04
Misc :
ALS Vial : 14 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
P001-CLAY-CF01-01

Integration File: autoint1.e
Quant Time: Mar 05 04:44:06 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

| Compound | R.T. | Response | Conc Units |
|---|---|---|---|
| System Monitoring Compounds | | | |
| 12) S 1-chlorooctadecane (S... | 12.840 | 3785768 | 33.659 ug/ml |
| Spiked Amount 50.000 | | Recovery = 67.32% | |
| Target Compounds | | | |

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

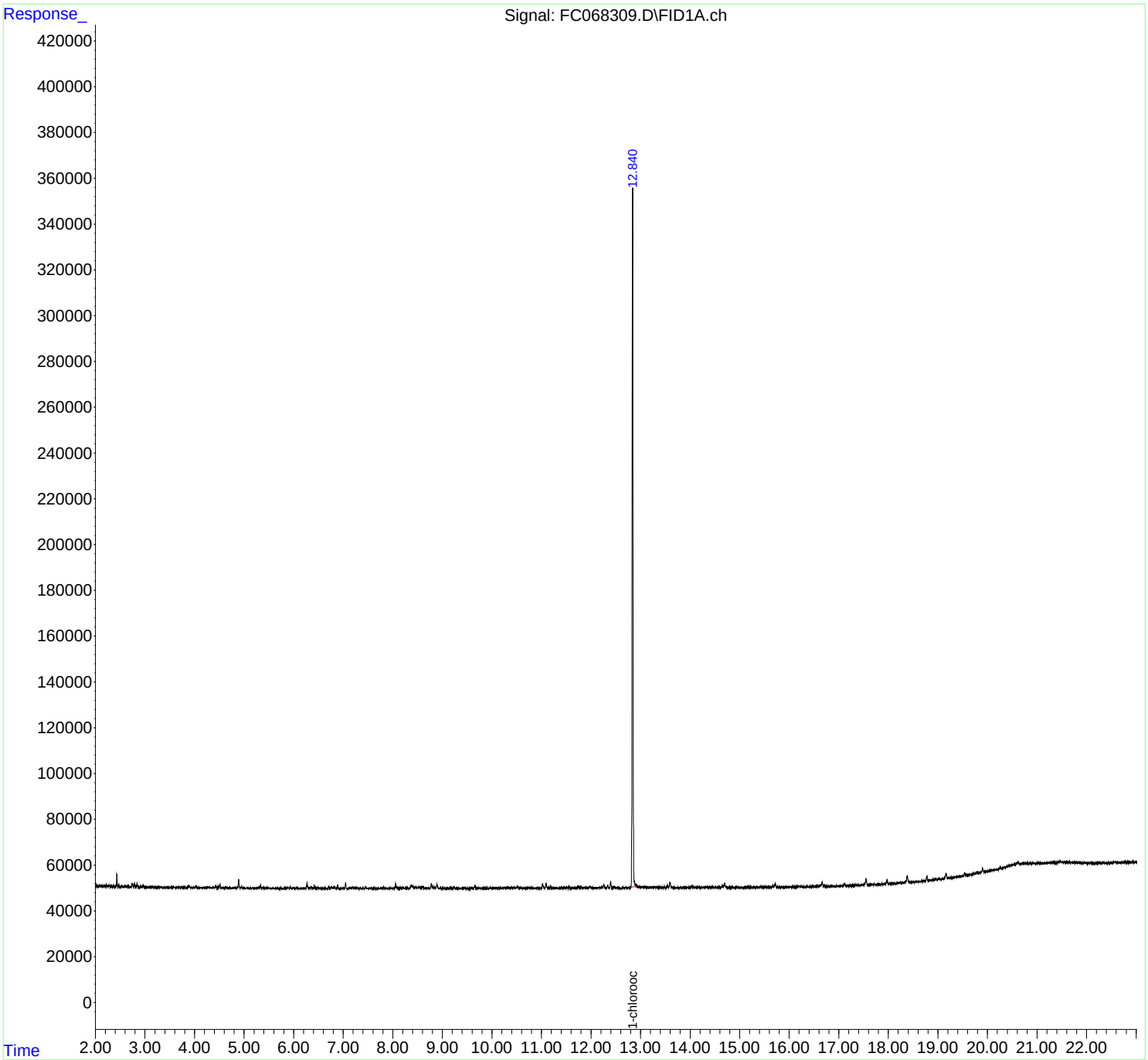
Quantitation Report (QT Reviewed)

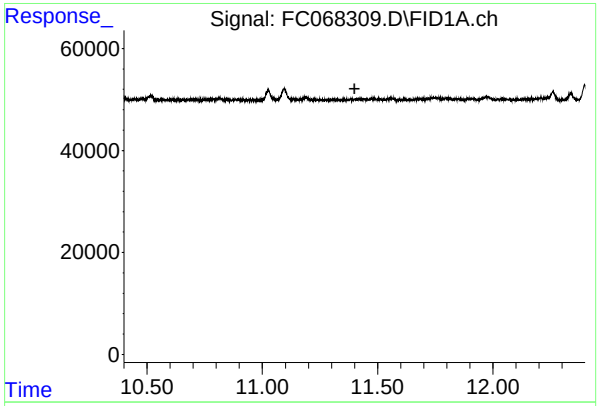
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022725AL\
Data File : FC068309.D
Signal(s) : FID1A.ch
Acq On : 27 Feb 2025 12:14
Operator : YP/AJ
Sample : Q1421-04
Misc :
ALS Vial : 14 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
P001-CLAY-CF01-01

Integration File: autoint1.e
Quant Time: Mar 05 04:44:06 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

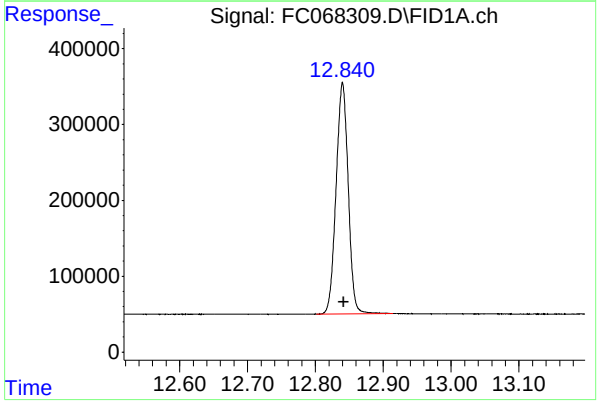





#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.400 min
Response: 0
Conc: N.D.

**Instrument :**
FID_C
**ClientSampleId :**
P001-CLAY-CF01-01




#12 1-chlorooctadecane (SURR)

R.T.: 12.840 min
Delta R.T.: -0.001 min
Response: 3785768
Conc: 33.66 ug/ml

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Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022725AL\
Data File : FC068309.D
Signal(s) : FID1A.ch
Acq On : 27 Feb 2025 12:14
Sample : Q1421-04
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Title : GC Extractables

Signal : FID1A.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 2.432 | 2.411 | 2.461 | PV | 5385 | 41394 | 1.07% | 0.437% |
| 2 | 2.473 | 2.461 | 2.507 | VV | 550 | 5362 | 0.14% | 0.057% |
| 3 | 2.560 | 2.507 | 2.576 | VV | 155 | 4173 | 0.11% | 0.044% |
| 4 | 2.590 | 2.576 | 2.618 | VV | 160 | 2542 | 0.07% | 0.027% |
| 5 | 2.654 | 2.618 | 2.718 | PV | 425 | 7765 | 0.20% | 0.082% |
| 6 | 2.742 | 2.718 | 2.771 | VV | 1400 | 20271 | 0.53% | 0.214% |
| 7 | 2.789 | 2.771 | 2.821 | VV | 1598 | 15922 | 0.41% | 0.168% |
| 8 | 2.839 | 2.821 | 2.901 | VV | 1628 | 16923 | 0.44% | 0.178% |
| 9 | 2.917 | 2.901 | 2.944 | VV | 233 | 3643 | 0.09% | 0.038% |
| 10 | 2.961 | 2.944 | 3.074 | VV | 1048 | 14177 | 0.37% | 0.150% |
| 11 | 3.087 | 3.074 | 3.130 | VV | 140 | 2390 | 0.06% | 0.025% |
| 12 | 3.153 | 3.130 | 3.188 | VV | 138 | 2697 | 0.07% | 0.028% |
| 13 | 3.207 | 3.188 | 3.241 | VV | 273 | 3927 | 0.10% | 0.041% |
| 14 | 3.258 | 3.241 | 3.290 | VV | 129 | 1684 | 0.04% | 0.018% |
| 15 | 3.302 | 3.290 | 3.338 | PV | 66 | 1841 | 0.05% | 0.019% |
| 16 | 3.372 | 3.338 | 3.461 | VV | 123 | 4013 | 0.10% | 0.042% |
| 17 | 3.466 | 3.461 | 3.471 | VV | 136 | 546 | 0.01% | 0.006% |
| 18 | 3.481 | 3.471 | 3.504 | VV | 129 | 1746 | 0.05% | 0.018% |
| 19 | 3.525 | 3.504 | 3.553 | VV | 296 | 3180 | 0.08% | 0.034% |
| 20 | 3.573 | 3.553 | 3.634 | VV | 172 | 4594 | 0.12% | 0.048% |
| 21 | 3.664 | 3.634 | 3.676 | VV | 127 | 2114 | 0.05% | 0.022% |
| 22 | 3.691 | 3.676 | 3.702 | VV | 220 | 2291 | 0.06% | 0.024% |
| 23 | 3.710 | 3.702 | 3.755 | VV | 176 | 3010 | 0.08% | 0.032% |
| 24 | 3.777 | 3.755 | 3.831 | VV | 213 | 4702 | 0.12% | 0.050% |
| 25 | 3.866 | 3.831 | 3.878 | VV | 470 | 5474 | 0.14% | 0.058% |
| 26 | 3.894 | 3.878 | 3.946 | VV | 945 | 11417 | 0.30% | 0.120% |
| 27 | 3.959 | 3.946 | 3.986 | VV | 178 | 1983 | 0.05% | 0.021% |
| 28 | 4.039 | 3.986 | 4.128 | PV | 764 | 16291 | 0.42% | 0.172% |
| 29 | 4.144 | 4.128 | 4.178 | VV | 121 | 2612 | 0.07% | 0.028% |
| 30 | 4.214 | 4.178 | 4.231 | VV | 203 | 4022 | 0.10% | 0.042% |
| 31 | 4.263 | 4.231 | 4.283 | VV | 650 | 8562 | 0.22% | 0.090% |
| 32 | 4.300 | 4.283 | 4.351 | VV | 216 | 5344 | 0.14% | 0.056% |
| 33 | 4.372 | 4.351 | 4.404 | VV | 373 | 6745 | 0.17% | 0.071% |
| 34 | 4.428 | 4.404 | 4.466 | VV | 1170 | 16764 | 0.43% | 0.177% |
| 35 | 4.484 | 4.466 | 4.498 | VV | 860 | 9589 | 0.25% | 0.101% |
| 36 | 4.514 | 4.498 | 4.535 | VV | 1552 | 15860 | 0.41% | 0.167% |

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|---|---|---|---|---|---|---|---|---|
| 37 | 4.544 | 4.535 | 4.596 | VV | 167 | 4431 | 0.11% | 0.047% |
| 38 | 4.631 | 4.596 | 4.671 | VV | 220 | 6143 | 0.16% | 0.065% |
| 39 | 4.710 | 4.671 | 4.737 | VV | 161 | 3059 | 0.08% | 0.032% |
| 40 | 4.751 | 4.737 | 4.763 | PV | 98 | 523 | 0.01% | 0.006% |
| 41 | 4.812 | 4.763 | 4.831 | VV | 287 | 3755 | 0.10% | 0.040% |
| 42 | 4.890 | 4.831 | 4.922 | VV | 3860 | 49266 | 1.28% | 0.520% |
| 43 | 4.947 | 4.922 | 4.985 | VV | 815 | 10616 | 0.28% | 0.112% |
| 44 | 4.994 | 4.985 | 5.021 | VV | 137 | 2227 | 0.06% | 0.023% |
| 45 | 5.024 | 5.021 | 5.032 | VV | 154 | 549 | 0.01% | 0.006% |
| 46 | 5.055 | 5.032 | 5.063 | VV | 125 | 1778 | 0.05% | 0.019% |
| 47 | 5.083 | 5.063 | 5.150 | VV | 279 | 6778 | 0.18% | 0.071% |
| 48 | 5.179 | 5.150 | 5.241 | VV | 215 | 7058 | 0.18% | 0.074% |
| 49 | 5.256 | 5.241 | 5.272 | VV | 217 | 3058 | 0.08% | 0.032% |
| 50 | 5.293 | 5.272 | 5.311 | VV | 432 | 6558 | 0.17% | 0.069% |
| 51 | 5.333 | 5.311 | 5.355 | VV | 1229 | 14881 | 0.39% | 0.157% |
| 52 | 5.389 | 5.355 | 5.439 | VV | 367 | 8839 | 0.23% | 0.093% |
| 53 | 5.477 | 5.439 | 5.492 | VV | 325 | 5989 | 0.16% | 0.063% |
| 54 | 5.502 | 5.492 | 5.553 | VV | 151 | 3575 | 0.09% | 0.038% |
| 55 | 5.582 | 5.553 | 5.627 | PV | 248 | 5702 | 0.15% | 0.060% |
| 56 | 5.636 | 5.627 | 5.650 | VV | 185 | 1517 | 0.04% | 0.016% |
| 57 | 5.663 | 5.650 | 5.721 | VV | 159 | 3389 | 0.09% | 0.036% |
| 58 | 5.745 | 5.721 | 5.771 | VV | 141 | 2014 | 0.05% | 0.021% |
| 59 | 5.841 | 5.771 | 5.868 | VV | 263 | 8724 | 0.23% | 0.092% |
| 60 | 5.887 | 5.868 | 5.905 | VV | 367 | 4848 | 0.13% | 0.051% |
| 61 | 5.930 | 5.905 | 5.970 | VV | 506 | 9635 | 0.25% | 0.102% |
| 62 | 5.990 | 5.970 | 6.025 | VV | 279 | 6276 | 0.16% | 0.066% |
| 63 | 6.061 | 6.025 | 6.095 | VV | 328 | 8367 | 0.22% | 0.088% |
| 64 | 6.104 | 6.095 | 6.130 | VV | 114 | 1837 | 0.05% | 0.019% |
| 65 | 6.146 | 6.130 | 6.182 | VV | 124 | 3266 | 0.08% | 0.034% |
| 66 | 6.189 | 6.182 | 6.240 | VV | 169 | 3608 | 0.09% | 0.038% |
| 67 | 6.270 | 6.240 | 6.333 | VV | 2494 | 35207 | 0.91% | 0.371% |
| 68 | 6.352 | 6.333 | 6.371 | VV | 639 | 8418 | 0.22% | 0.089% |
| 69 | 6.388 | 6.371 | 6.404 | VV | 434 | 5162 | 0.13% | 0.054% |
| 70 | 6.418 | 6.404 | 6.441 | VV | 1042 | 11891 | 0.31% | 0.125% |
| 71 | 6.451 | 6.441 | 6.468 | VV | 374 | 3920 | 0.10% | 0.041% |
| 72 | 6.490 | 6.468 | 6.554 | VV | 578 | 9416 | 0.24% | 0.099% |
| 73 | 6.566 | 6.554 | 6.583 | VV | 131 | 1796 | 0.05% | 0.019% |
| 74 | 6.593 | 6.583 | 6.618 | VV | 135 | 2129 | 0.06% | 0.022% |
| 75 | 6.637 | 6.618 | 6.648 | VV | 177 | 1942 | 0.05% | 0.020% |
| 76 | 6.662 | 6.648 | 6.688 | VV | 147 | 2145 | 0.06% | 0.023% |
| 77 | 6.710 | 6.688 | 6.738 | VV | 666 | 8290 | 0.21% | 0.087% |
| 78 | 6.761 | 6.738 | 6.794 | VV | 647 | 12449 | 0.32% | 0.131% |
| 79 | 6.812 | 6.794 | 6.857 | VV | 657 | 13889 | 0.36% | 0.146% |
| 80 | 6.888 | 6.857 | 6.912 | VV | 1102 | 15654 | 0.41% | 0.165% |
| 81 | 6.925 | 6.912 | 6.935 | VV | 227 | 1640 | 0.04% | 0.017% |
| 82 | 6.944 | 6.935 | 6.953 | VV | 138 | 819 | 0.02% | 0.009% |
| 83 | 6.971 | 6.953 | 6.980 | VV | 168 | 2163 | 0.06% | 0.023% |
| 84 | 6.992 | 6.980 | 7.020 | VV | 230 | 3163 | 0.08% | 0.033% |
| 85 | 7.049 | 7.020 | 7.079 | VV | 2678 | 29242 | 0.76% | 0.308% |
| 86 | 7.126 | 7.079 | 7.138 | VV | 350 | 7192 | 0.19% | 0.076% |
| 87 | 7.155 | 7.138 | 7.168 | VV | 394 | 4767 | 0.12% | 0.050% |
| 88 | 7.190 | 7.168 | 7.215 | VV | 766 | 11824 | 0.31% | 0.125% |
| 89 | 7.252 | 7.215 | 7.268 | VV | 457 | 8185 | 0.21% | 0.086% |

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|---|---|---|---|---|---|---|---|---|
| 90 | 7.280 | 7.268 | 7.321 | VV | 478 | 7111 | 0.18% | 0.075% |
| 91 | 7.335 | 7.321 | 7.375 | VV | 189 | 3598 | 0.09% | 0.038% |
| 92 | 7.394 | 7.375 | 7.421 | VV | 206 | 2555 | 0.07% | 0.027% |
| 93 | 7.450 | 7.421 | 7.488 | PV | 901 | 11631 | 0.30% | 0.123% |
| 94 | 7.531 | 7.488 | 7.575 | VV | 277 | 8167 | 0.21% | 0.086% |
| 95 | 7.598 | 7.575 | 7.626 | VV | 225 | 4614 | 0.12% | 0.049% |
| 96 | 7.638 | 7.626 | 7.659 | VV | 120 | 1870 | 0.05% | 0.020% |
| 97 | 7.671 | 7.659 | 7.698 | VV | 145 | 2104 | 0.05% | 0.022% |
| 98 | 7.710 | 7.698 | 7.733 | VV | 168 | 2228 | 0.06% | 0.023% |
| 99 | 7.755 | 7.733 | 7.780 | VV | 498 | 6593 | 0.17% | 0.070% |
| 100 | 7.811 | 7.780 | 7.897 | VV | 580 | 13123 | 0.34% | 0.138% |
| 101 | 7.915 | 7.897 | 7.946 | VV | 166 | 2778 | 0.07% | 0.029% |
| 102 | 7.967 | 7.946 | 7.992 | VV | 359 | 4761 | 0.12% | 0.050% |
| 103 | 8.002 | 7.992 | 8.032 | VV | 137 | 2553 | 0.07% | 0.027% |
| 104 | 8.059 | 8.032 | 8.129 | VV | 2198 | 35920 | 0.93% | 0.379% |
| 105 | 8.153 | 8.129 | 8.188 | VV | 435 | 9747 | 0.25% | 0.103% |
| 106 | 8.207 | 8.188 | 8.229 | VV | 369 | 6215 | 0.16% | 0.066% |
| 107 | 8.252 | 8.229 | 8.273 | VV | 358 | 5270 | 0.14% | 0.056% |
| 108 | 8.288 | 8.273 | 8.336 | VV | 437 | 6363 | 0.16% | 0.067% |
| 109 | 8.369 | 8.336 | 8.496 | PV | 1536 | 64001 | 1.66% | 0.675% |
| 110 | 8.517 | 8.496 | 8.534 | VV | 645 | 10669 | 0.28% | 0.113% |
| 111 | 8.543 | 8.534 | 8.556 | VV | 459 | 5512 | 0.14% | 0.058% |
| 112 | 8.565 | 8.556 | 8.578 | VV | 408 | 4766 | 0.12% | 0.050% |
| 113 | 8.598 | 8.578 | 8.637 | VV | 715 | 16110 | 0.42% | 0.170% |
| 114 | 8.659 | 8.637 | 8.681 | VV | 355 | 5995 | 0.16% | 0.063% |
| 115 | 8.709 | 8.681 | 8.735 | VV | 386 | 6293 | 0.16% | 0.066% |
| 116 | 8.777 | 8.735 | 8.800 | VV | 2150 | 30799 | 0.80% | 0.325% |
| 117 | 8.812 | 8.800 | 8.864 | VV | 828 | 21060 | 0.55% | 0.222% |
| 118 | 8.892 | 8.864 | 8.941 | VV | 1867 | 32053 | 0.83% | 0.338% |
| 119 | 8.965 | 8.941 | 8.994 | VV | 452 | 7693 | 0.20% | 0.081% |
| 120 | 9.014 | 8.994 | 9.043 | VV | 325 | 5186 | 0.13% | 0.055% |
| 121 | 9.065 | 9.043 | 9.083 | VV | 163 | 3384 | 0.09% | 0.036% |
| 122 | 9.095 | 9.083 | 9.103 | VV | 218 | 2028 | 0.05% | 0.021% |
| 123 | 9.108 | 9.103 | 9.115 | VV | 194 | 1313 | 0.03% | 0.014% |
| 124 | 9.122 | 9.115 | 9.140 | VV | 182 | 1944 | 0.05% | 0.021% |
| 125 | 9.180 | 9.140 | 9.214 | VV | 385 | 9010 | 0.23% | 0.095% |
| 126 | 9.241 | 9.214 | 9.284 | VV | 718 | 11899 | 0.31% | 0.125% |
| 127 | 9.311 | 9.284 | 9.334 | PV | 175 | 3604 | 0.09% | 0.038% |
| 128 | 9.347 | 9.334 | 9.359 | VV | 164 | 1327 | 0.03% | 0.014% |
| 129 | 9.382 | 9.359 | 9.411 | VV | 321 | 4235 | 0.11% | 0.045% |
| 130 | 9.435 | 9.411 | 9.472 | VV | 395 | 7141 | 0.18% | 0.075% |
| 131 | 9.486 | 9.472 | 9.504 | VV | 228 | 2595 | 0.07% | 0.027% |
| 132 | 9.509 | 9.504 | 9.561 | VV | 118 | 1998 | 0.05% | 0.021% |
| 133 | 9.575 | 9.561 | 9.630 | VV | 383 | 7549 | 0.20% | 0.080% |
| 134 | 9.656 | 9.630 | 9.708 | VV | 1186 | 20996 | 0.54% | 0.221% |
| 135 | 9.750 | 9.708 | 9.849 | VV | 323 | 14338 | 0.37% | 0.151% |
| 136 | 9.879 | 9.849 | 9.904 | VV | 119 | 2588 | 0.07% | 0.027% |
| 137 | 9.967 | 9.904 | 9.989 | VV | 343 | 8523 | 0.22% | 0.090% |
| 138 | 10.045 | 9.989 | 10.074 | VV | 353 | 10165 | 0.26% | 0.107% |
| 139 | 10.082 | 10.074 | 10.103 | VV | 341 | 3923 | 0.10% | 0.041% |
| 140 | 10.136 | 10.103 | 10.208 | VV | 309 | 10722 | 0.28% | 0.113% |
| 141 | 10.249 | 10.208 | 10.302 | VV | 354 | 13416 | 0.35% | 0.141% |

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|---|---|---|---|---|---|---|---|---|
| 142 | 10.333 | 10.302 | 10.358 | VV | 469 | 10073 | 0.26% | 0.106% |
| 143 | 10.396 | 10.358 | 10.426 | VV | 488 | 13508 | 0.35% | 0.142% |
| 144 | 10.444 | 10.426 | 10.461 | VV | 366 | 5237 | 0.14% | 0.055% |
| 145 | 10.478 | 10.461 | 10.486 | VV | 323 | 4036 | 0.10% | 0.043% |
| 146 | 10.515 | 10.486 | 10.561 | VV | 987 | 20295 | 0.53% | 0.214% |
| 147 | 10.580 | 10.561 | 10.628 | VV | 277 | 7498 | 0.19% | 0.079% |
| 148 | 10.678 | 10.628 | 10.688 | VV | 218 | 5351 | 0.14% | 0.056% |
| 149 | 10.708 | 10.688 | 10.734 | VV | 271 | 5398 | 0.14% | 0.057% |
| 150 | 10.754 | 10.734 | 10.767 | VV | 214 | 3548 | 0.09% | 0.037% |
| 151 | 10.782 | 10.767 | 10.794 | VV | 275 | 3691 | 0.10% | 0.039% |
| 152 | 10.815 | 10.794 | 10.835 | VV | 483 | 7674 | 0.20% | 0.081% |
| 153 | 10.847 | 10.835 | 10.864 | VV | 175 | 2473 | 0.06% | 0.026% |
| 154 | 10.895 | 10.864 | 10.981 | VV | 212 | 7716 | 0.20% | 0.081% |
| 155 | 11.025 | 10.981 | 11.061 | VV | 2032 | 31891 | 0.83% | 0.336% |
| 156 | 11.095 | 11.061 | 11.171 | VV | 2357 | 42976 | 1.11% | 0.453% |
| 157 | 11.188 | 11.171 | 11.235 | VV | 731 | 11330 | 0.29% | 0.119% |
| 158 | 11.246 | 11.235 | 11.271 | VV | 210 | 2249 | 0.06% | 0.024% |
| 159 | 11.313 | 11.271 | 11.324 | VV | 177 | 3354 | 0.09% | 0.035% |
| 160 | 11.334 | 11.324 | 11.342 | VV | 140 | 1202 | 0.03% | 0.013% |
| 161 | 11.438 | 11.342 | 11.462 | VV | 297 | 13991 | 0.36% | 0.148% |
| 162 | 11.480 | 11.462 | 11.521 | VV | 416 | 9009 | 0.23% | 0.095% |
| 163 | 11.556 | 11.521 | 11.590 | VV | 401 | 9735 | 0.25% | 0.103% |
| 164 | 11.679 | 11.590 | 11.694 | VV | 246 | 9854 | 0.26% | 0.104% |
| 165 | 11.752 | 11.694 | 11.777 | VV | 503 | 18662 | 0.48% | 0.197% |
| 166 | 11.796 | 11.777 | 11.828 | VV | 393 | 9458 | 0.25% | 0.100% |
| 167 | 11.850 | 11.828 | 11.867 | VV | 263 | 4660 | 0.12% | 0.049% |
| 168 | 11.894 | 11.867 | 11.940 | VV | 368 | 10253 | 0.27% | 0.108% |
| 169 | 11.975 | 11.940 | 12.011 | VV | 750 | 17219 | 0.45% | 0.182% |
| 170 | 12.031 | 12.011 | 12.094 | VV | 267 | 8060 | 0.21% | 0.085% |
| 171 | 12.260 | 12.094 | 12.297 | VV | 1640 | 45977 | 1.19% | 0.485% |
| 172 | 12.337 | 12.297 | 12.374 | VV | 1359 | 21064 | 0.55% | 0.222% |
| 173 | 12.398 | 12.374 | 12.447 | VV | 2995 | 40915 | 1.06% | 0.432% |
| 174 | 12.467 | 12.447 | 12.498 | VV | 502 | 6641 | 0.17% | 0.070% |
| 175 | 12.514 | 12.498 | 12.525 | VV | 197 | 3137 | 0.08% | 0.033% |
| 176 | 12.535 | 12.525 | 12.598 | VV | 216 | 4538 | 0.12% | 0.048% |
| 177 | 12.601 | 12.598 | 12.630 | VV | 118 | 1247 | 0.03% | 0.013% |
| 178 | 12.673 | 12.630 | 12.704 | PV | 272 | 7208 | 0.19% | 0.076% |
| 179 | 12.720 | 12.704 | 12.734 | VV | 228 | 2629 | 0.07% | 0.028% |
| 180 | 12.764 | 12.734 | 12.783 | VV | 226 | 5478 | 0.14% | 0.058% |
| 181 | 12.840 | 12.783 | 12.985 | VV | 304925 | 3860404 | 100.00% | 40.714% |
| 182 | 13.006 | 12.985 | 13.048 | VV | 705 | 19506 | 0.51% | 0.206% |
| 183 | 13.063 | 13.048 | 13.111 | VV | 536 | 15539 | 0.40% | 0.164% |
| 184 | 13.126 | 13.111 | 13.151 | VV | 385 | 7795 | 0.20% | 0.082% |
| 185 | 13.213 | 13.151 | 13.243 | VV | 456 | 19528 | 0.51% | 0.206% |
| 186 | 13.285 | 13.243 | 13.330 | VV | 488 | 18570 | 0.48% | 0.196% |
| 187 | 13.357 | 13.330 | 13.374 | VV | 283 | 6412 | 0.17% | 0.068% |
| 188 | 13.387 | 13.374 | 13.404 | VV | 294 | 4466 | 0.12% | 0.047% |
| 189 | 13.442 | 13.404 | 13.483 | VV | 336 | 12812 | 0.33% | 0.135% |
| 190 | 13.543 | 13.483 | 13.571 | VV | 1198 | 24045 | 0.62% | 0.254% |
| 191 | 13.595 | 13.571 | 13.641 | VV | 2517 | 39840 | 1.03% | 0.420% |
| 192 | 13.648 | 13.641 | 13.668 | VV | 184 | 3027 | 0.08% | 0.032% |
| 193 | 13.673 | 13.668 | 13.711 | VV | 211 | 4077 | 0.11% | 0.043% |
| 194 | 13.720 | 13.711 | 13.761 | VV | 169 | 3118 | 0.08% | 0.033% |

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| 195 | 13.770 | 13.761 | 13.784 | VV | 141 | 1006 | 0.03% | 0.011% |
| 196 | 13.806 | 13.784 | 13.861 | PV | 175 | 6354 | 0.16% | 0.067% |
| 197 | 13.869 | 13.861 | 13.878 | VV | 140 | 1282 | 0.03% | 0.014% |
| 198 | 13.887 | 13.878 | 13.914 | VV | 106 | 2425 | 0.06% | 0.026% |
| 199 | 13.925 | 13.914 | 13.945 | VV | 159 | 2253 | 0.06% | 0.024% |
| 200 | 13.954 | 13.945 | 14.000 | VV | 192 | 4456 | 0.12% | 0.047% |
| 201 | 14.032 | 14.000 | 14.071 | VV | 971 | 19824 | 0.51% | 0.209% |
| 202 | 14.080 | 14.071 | 14.130 | VV | 278 | 7116 | 0.18% | 0.075% |
| 203 | 14.154 | 14.130 | 14.191 | VV | 324 | 8086 | 0.21% | 0.085% |
| 204 | 14.217 | 14.191 | 14.230 | VV | 261 | 4544 | 0.12% | 0.048% |
| 205 | 14.248 | 14.230 | 14.277 | VV | 285 | 6597 | 0.17% | 0.070% |
| 206 | 14.297 | 14.277 | 14.314 | VV | 330 | 5707 | 0.15% | 0.060% |
| 207 | 14.330 | 14.314 | 14.383 | VV | 292 | 9699 | 0.25% | 0.102% |
| 208 | 14.409 | 14.383 | 14.440 | VV | 262 | 7535 | 0.20% | 0.079% |
| 209 | 14.462 | 14.440 | 14.498 | VV | 288 | 9354 | 0.24% | 0.099% |
| 210 | 14.504 | 14.498 | 14.600 | VV | 272 | 12550 | 0.33% | 0.132% |
| 211 | 14.652 | 14.600 | 14.671 | VV | 1077 | 18463 | 0.48% | 0.195% |
| 212 | 14.695 | 14.671 | 14.767 | VV | 2005 | 37019 | 0.96% | 0.390% |
| 213 | 14.777 | 14.767 | 14.801 | VV | 165 | 1810 | 0.05% | 0.019% |
| 214 | 14.809 | 14.801 | 14.838 | VV | 163 | 1748 | 0.05% | 0.018% |
| 215 | 14.861 | 14.838 | 14.892 | PV | 207 | 4958 | 0.13% | 0.052% |
| 216 | 14.901 | 14.892 | 14.910 | VV | 142 | 1103 | 0.03% | 0.012% |
| 217 | 14.920 | 14.910 | 14.952 | VV | 121 | 2003 | 0.05% | 0.021% |
| 218 | 14.968 | 14.952 | 14.987 | VV | 130 | 1555 | 0.04% | 0.016% |
| 219 | 15.003 | 14.987 | 15.030 | VV | 158 | 2004 | 0.05% | 0.021% |
| 220 | 15.044 | 15.030 | 15.054 | VV | 104 | 1034 | 0.03% | 0.011% |
| 221 | 15.063 | 15.054 | 15.094 | VV | 129 | 1699 | 0.04% | 0.018% |
| 222 | 15.120 | 15.094 | 15.148 | VV | 183 | 3809 | 0.10% | 0.040% |
| 223 | 15.163 | 15.148 | 15.193 | VV | 222 | 3881 | 0.10% | 0.041% |
| 224 | 15.216 | 15.193 | 15.251 | VV | 314 | 6103 | 0.16% | 0.064% |
| 225 | 15.265 | 15.251 | 15.284 | VV | 126 | 2053 | 0.05% | 0.022% |
| 226 | 15.314 | 15.284 | 15.338 | VV | 128 | 3220 | 0.08% | 0.034% |
| 227 | 15.351 | 15.338 | 15.364 | VV | 162 | 2003 | 0.05% | 0.021% |
| 228 | 15.406 | 15.364 | 15.411 | VV | 177 | 4216 | 0.11% | 0.044% |
| 229 | 15.418 | 15.411 | 15.428 | VV | 189 | 1419 | 0.04% | 0.015% |
| 230 | 15.454 | 15.428 | 15.469 | VV | 179 | 3165 | 0.08% | 0.033% |
| 231 | 15.504 | 15.469 | 15.545 | VV | 288 | 6778 | 0.18% | 0.071% |
| 232 | 15.556 | 15.545 | 15.569 | VV | 198 | 2630 | 0.07% | 0.028% |
| 233 | 15.574 | 15.569 | 15.634 | VV | 202 | 5304 | 0.14% | 0.056% |
| 234 | 15.677 | 15.634 | 15.692 | VV | 769 | 12050 | 0.31% | 0.127% |
| 235 | 15.716 | 15.692 | 15.752 | VV | 1728 | 27648 | 0.72% | 0.292% |
| 236 | 15.761 | 15.752 | 15.801 | VV | 237 | 3706 | 0.10% | 0.039% |
| 237 | 15.817 | 15.801 | 15.829 | VV | 133 | 1617 | 0.04% | 0.017% |
| 238 | 15.860 | 15.829 | 15.929 | PV | 115 | 4145 | 0.11% | 0.044% |
| 239 | 15.945 | 15.929 | 15.964 | VV | 129 | 1367 | 0.04% | 0.014% |
| 240 | 15.997 | 15.964 | 16.025 | PV | 120 | 1968 | 0.05% | 0.021% |
| 241 | 16.035 | 16.025 | 16.061 | VV | 108 | 1369 | 0.04% | 0.014% |
| 242 | 16.074 | 16.061 | 16.092 | VV | 138 | 1401 | 0.04% | 0.015% |
| 243 | 16.106 | 16.092 | 16.141 | VV | 130 | 1846 | 0.05% | 0.019% |
| 244 | 16.198 | 16.141 | 16.288 | PV | 431 | 13028 | 0.34% | 0.137% |
| 245 | 16.294 | 16.288 | 16.340 | VV | 98 | 2075 | 0.05% | 0.022% |
| 246 | 16.419 | 16.340 | 16.442 | VV | 185 | 5936 | 0.15% | 0.063% |

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| 247 | 16.449 | 16.442 | 16.478 | VV | 151 | 2272 | 0.06% | 0.024% |
| 248 | 16.503 | 16.478 | 16.531 | VV | 162 | 2805 | 0.07% | 0.030% |
| 249 | 16.566 | 16.531 | 16.605 | VV | 215 | 5697 | 0.15% | 0.060% |
| 250 | 16.629 | 16.605 | 16.640 | VV | 598 | 7686 | 0.20% | 0.081% |
| 251 | 16.664 | 16.640 | 16.740 | VV | 1845 | 33424 | 0.87% | 0.353% |
| 252 | 16.763 | 16.740 | 16.828 | VV | 142 | 4741 | 0.12% | 0.050% |
| 253 | 16.831 | 16.828 | 16.911 | VV | 130 | 2313 | 0.06% | 0.024% |
| 254 | 16.945 | 16.911 | 16.957 | PV | 135 | 1514 | 0.04% | 0.016% |
| 255 | 16.984 | 16.957 | 17.003 | VV | 88 | 1202 | 0.03% | 0.013% |
| 256 | 17.017 | 17.003 | 17.026 | VV | 105 | 656 | 0.02% | 0.007% |
| 257 | 17.043 | 17.026 | 17.058 | PV | 78 | 956 | 0.02% | 0.010% |
| 258 | 17.114 | 17.058 | 17.207 | VV | 1151 | 21274 | 0.55% | 0.224% |
| 259 | 17.282 | 17.207 | 17.320 | VV | 80 | 2971 | 0.08% | 0.031% |
| 260 | 17.333 | 17.320 | 17.368 | PV | 87 | 2000 | 0.05% | 0.021% |
| 261 | 17.401 | 17.368 | 17.414 | VV | 119 | 2694 | 0.07% | 0.028% |
| 262 | 17.418 | 17.414 | 17.431 | VV | 93 | 662 | 0.02% | 0.007% |
| 263 | 17.446 | 17.431 | 17.470 | PV | 142 | 2023 | 0.05% | 0.021% |
| 264 | 17.549 | 17.470 | 17.589 | VV | 2702 | 50782 | 1.32% | 0.536% |
| 265 | 17.597 | 17.589 | 17.608 | VV | 156 | 1129 | 0.03% | 0.012% |
| 266 | 17.634 | 17.608 | 17.666 | PV | 179 | 2975 | 0.08% | 0.031% |
| 267 | 17.735 | 17.666 | 17.793 | VV | 160 | 6652 | 0.17% | 0.070% |
| 268 | 17.832 | 17.793 | 17.847 | PV | 156 | 3636 | 0.09% | 0.038% |
| 269 | 17.858 | 17.847 | 17.884 | VV | 129 | 2162 | 0.06% | 0.023% |
| 270 | 17.972 | 17.884 | 18.018 | VV | 2004 | 35727 | 0.93% | 0.377% |
| 271 | 18.145 | 18.018 | 18.161 | VV | 130 | 7024 | 0.18% | 0.074% |
| 272 | 18.239 | 18.161 | 18.265 | PV | 229 | 7084 | 0.18% | 0.075% |
| 273 | 18.284 | 18.265 | 18.294 | VV | 132 | 1902 | 0.05% | 0.020% |
| 274 | 18.381 | 18.294 | 18.442 | VV | 3056 | 58237 | 1.51% | 0.614% |
| 275 | 18.465 | 18.442 | 18.474 | VV | 128 | 2201 | 0.06% | 0.023% |
| 276 | 18.575 | 18.474 | 18.584 | VV | 116 | 5166 | 0.13% | 0.054% |
| 277 | 18.592 | 18.584 | 18.601 | PV | 180 | 816 | 0.02% | 0.009% |
| 278 | 18.636 | 18.601 | 18.658 | VV | 230 | 3713 | 0.10% | 0.039% |
| 279 | 18.688 | 18.658 | 18.698 | VV | 152 | 2163 | 0.06% | 0.023% |
| 280 | 18.778 | 18.698 | 18.811 | PV | 1966 | 32065 | 0.83% | 0.338% |
| 281 | 18.958 | 18.811 | 18.971 | VV | 216 | 11583 | 0.30% | 0.122% |
| 282 | 19.027 | 18.971 | 19.044 | VV | 348 | 9603 | 0.25% | 0.101% |
| 283 | 19.101 | 19.044 | 19.110 | VV | 229 | 7498 | 0.19% | 0.079% |
| 284 | 19.164 | 19.110 | 19.198 | VV | 2482 | 49411 | 1.28% | 0.521% |
| 285 | 19.398 | 19.198 | 19.427 | VV | 565 | 43746 | 1.13% | 0.461% |
| 286 | 19.476 | 19.427 | 19.487 | VV | 600 | 18943 | 0.49% | 0.200% |
| 287 | 19.539 | 19.487 | 19.572 | VV | 1803 | 46001 | 1.19% | 0.485% |
| 288 | 19.605 | 19.572 | 19.615 | VV | 670 | 16286 | 0.42% | 0.172% |
| 289 | 19.801 | 19.615 | 19.845 | VV | 1526 | 137308 | 3.56% | 1.448% |
| 290 | 19.902 | 19.845 | 19.941 | VV | 2806 | 98683 | 2.56% | 1.041% |
| 291 | 19.970 | 19.941 | 19.991 | VV | 1512 | 43030 | 1.11% | 0.454% |
| 292 | 20.176 | 19.991 | 20.187 | VV | 1817 | 190675 | 4.94% | 2.011% |
| 293 | 20.258 | 20.187 | 20.297 | VV | 2619 | 134826 | 3.49% | 1.422% |
| 294 | 20.438 | 20.297 | 20.458 | VV | 3103 | 244924 | 6.34% | 2.583% |
| 295 | 20.616 | 20.458 | 20.662 | VV | 4071 | 402522 | 10.43% | 4.245% |
| 296 | 20.697 | 20.662 | 20.714 | VV | 3300 | 102225 | 2.65% | 1.078% |
| 297 | 20.728 | 20.714 | 20.741 | VV | 3208 | 51558 | 1.34% | 0.544% |
| 298 | 20.866 | 20.741 | 20.897 | VV | 3031 | 285156 | 7.39% | 3.007% |
| 299 | 20.935 | 20.897 | 20.971 | VV | 2905 | 125632 | 3.25% | 1.325% |

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| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 300 | 21.017 | 20.971 | 21.077 | VV | 2880 | 172990 | 4.48% | 1.824% |
| 301 | 21.158 | 21.077 | 21.194 | VV | 2450 | 173418 | 4.49% | 1.829% |
| 302 | 21.272 | 21.194 | 21.334 | VV | 2359 | 192086 | 4.98% | 2.026% |
| 303 | 21.468 | 21.334 | 21.518 | VV | 2497 | 240746 | 6.24% | 2.539% |
| 304 | 21.542 | 21.518 | 21.564 | VV | 1922 | 53268 | 1.38% | 0.562% |
| 305 | 21.601 | 21.564 | 21.671 | VV | 1792 | 109451 | 2.84% | 1.154% |
| 306 | 21.679 | 21.671 | 21.835 | VV | 1608 | 130782 | 3.39% | 1.379% |
| 307 | 21.868 | 21.835 | 21.918 | VV | 1071 | 47646 | 1.23% | 0.503% |
| 308 | 21.939 | 21.918 | 21.968 | VV | 816 | 23409 | 0.61% | 0.247% |
| 309 | 21.982 | 21.968 | 22.121 | VV | 760 | 43679 | 1.13% | 0.461% |
| 310 | 22.143 | 22.121 | 22.208 | VV | 245 | 7858 | 0.20% | 0.083% |

Sum of corrected areas: 9481730

Aliphatic EPH 021125.M Fri Feb 28 01:13:46 2025

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Weston Solutions, Inc. | Date Collected: | 02/24/25 |
| Project: | RFP 905 | Date Received: | 02/24/25 |
| Client Sample ID: | P001-CLAY-CF01-01 | SDG No.: | Q1421 |
| Lab Sample ID: | Q1421-04 | Matrix: | Water |
| Analytical Method: | NJEPH | % Solid: | 0 |
| Sample Wt/Vol: | 1000 Units: mL | Final Vol: | 2000 uL |
| Soil Aliquot Vol: | uL | Test: | EPH |
| Prep Method : | SW3510 | | |

| File ID : | Dilution: | Prep Date : | Date Analyzed : | Prep Batch ID |
|---|---|---|---|---|
| FD049118.D | 1 | 02/26/25 | 02/27/25 | PB166883 |

| CAS Number | Parameter | | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | |
| Aromatic C10-C12 | Aromatic C10-C12 | | 3.32 | U | 3.32 | 20.0 | ug/l |
| Aromatic C12-C16 | Aromatic C12-C16 | | 12.2 | J | 3.69 | 30.0 | ug/l |
| Aromatic C16-C21 | Aromatic C16-C21 | | 43.0 | J | 12.7 | 50.0 | ug/l |
| Aromatic C21-C36 | Aromatic C21-C36 | | 25.2 | U | 25.2 | 80.0 | ug/l |
| **SURROGATES** | | | | | | | |
| 580-13-2 | 2-Bromonaphthalene (SURR) | | 60.2 | | 40 - 140 | 120% | SPK: 50 |
| 321-60-8 | 2-Flurobiphenyl (SURR) | | 61.8 | | 40 - 140 | 124% | SPK: 50 |
| 84-15-1 | ortho-Terphenyl (SURR) | | 54.1 | | 40 - 140 | 108% | SPK: 50 |

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

# Quantitation Report For Aromatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | Q1421-04 | Acq On: | 27 Feb 2025 12:14 |
| Client Sample ID: | P001-CLAY-CF01-01 | Operator: | YP/AJ |
| Data file: | FD049118.D | Misc: | |
| Instrument: | FID_D | ALS Vial: | 64 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aromatic C10-C12 | 4.076 | 5.794 | 698221 | 4.391 | 200 | ug/ml |
| Aromatic C12-C16 | 5.795 | 8.397 | 978814 | 6.082 | 300 | ug/ml |
| Aromatic C16-C21 | 8.398 | 12.661 | 3299543 | 21.515 | 500 | ug/ml |
| Aromatic C21-C36 | 12.662 | 18.071 | 3819898 | 26.691 | 800 | ug/ml |
| Aromatic EPH | 4.076 | 18.071 | 8796476 | 58.679 | | ug/ml |
| 2-Bromonaphthalene (SURR) | 7.353 | 7.353 | 8613080 | 60.19 | | ug/ml |
| 2-Flurobiphenyl (SURR) | 8.203 | 8.203 | 5429412 | 61.76 | | ug/ml |
| ortho-Terphenyl (SURR) | 11.237 | 11.237 | 8755655 | 54.12 | | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022725AR\
Data File : FD049118.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2025 12:14
Operator : YP/AJ
Sample : Q1421-04
Misc :
ALS Vial : 64 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF01-01

Integration File: autoint1.e
Quant Time: Feb 28 01:26:25 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

| Compound | R.T. | Response | Conc Units |
|---|---|---|---|
| System Monitoring Compounds | | | |
| 4) S 2-Bromonaphthalene (S... | 7.353 | 8613080 | 60.185 ug/ml |
| Spiked Amount 50.000 | | Recovery = | 120.37% |
| 6) S 2-Flurobiphenyl (SURR) | 8.203 | 5429412 | 61.760 ug/ml |
| Spiked Amount 50.000 Range | 0 - 131 | Recovery = | 123.52% |
| 11) S ortho-Terphenyl (SURR) | 11.237 | 8755655 | 54.123 ug/ml |
| Spiked Amount 50.000 | | Recovery = | 108.25% |
| Target Compounds | | | |

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

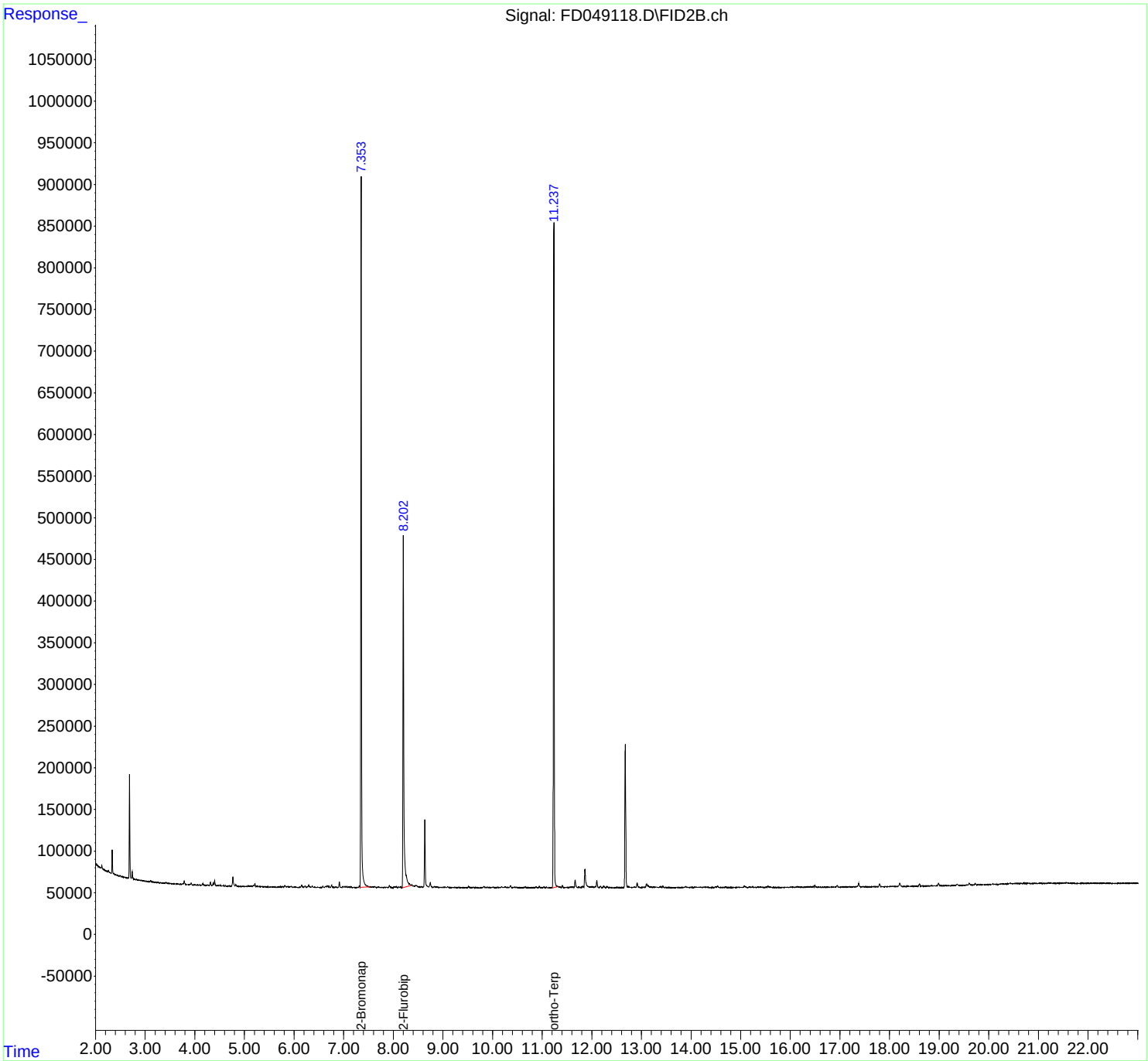
Quantitation Report (QT Reviewed)

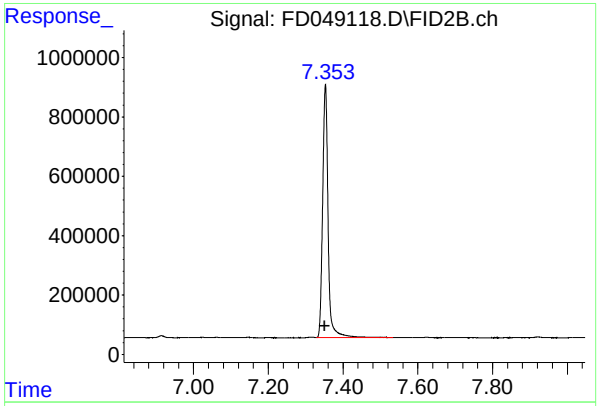
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022725AR\
Data File : FD049118.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2025 12:14
Operator : YP/AJ
Sample : Q1421-04
Misc :
ALS Vial : 64 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF01-01

Integration File: autoint1.e
Quant Time: Feb 28 01:26:25 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

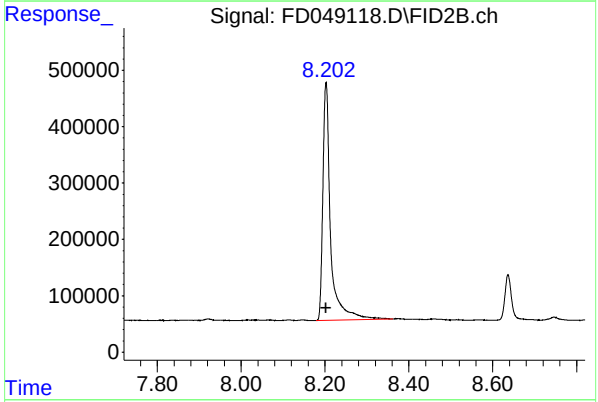





#4 2-Bromonaphthalene (SURR)

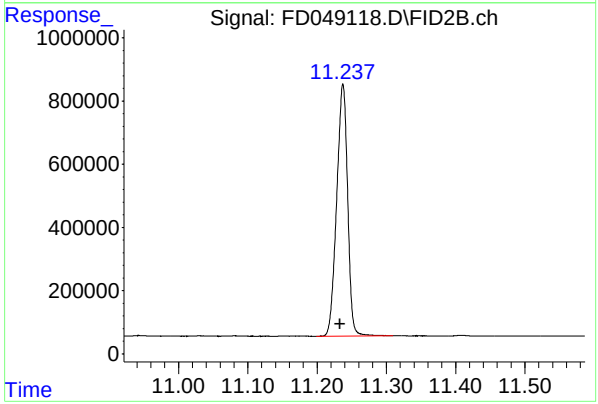
R.T.: 7.353 min
Delta R.T.: 0.002 min
Response: 8613080
Conc: 60.19 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF01-01




#6 2-Flurobiphenyl (SURR)

R.T.: 8.203 min
Delta R.T.: 0.000 min
Response: 5429412
Conc: 61.76 ug/ml




#11 ortho-Terphenyl (SURR)

R.T.: 11.237 min
Delta R.T.: 0.004 min
Response: 8755655
Conc: 54.12 ug/ml

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Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022725AR\
Data File : FD049118.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2025 12:14
Sample : Q1421-04
Misc :
ALS Vial : 64 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Title : GC Extractables

Signal : FID2B.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 4.051 | 4.042 | 4.077 | BV | 272 | 2653 | 0.03% | 0.008% |
| 2 | 4.085 | 4.077 | 4.105 | PV | 249 | 2175 | 0.02% | 0.007% |
| 3 | 4.112 | 4.105 | 4.120 | VV | 167 | 1006 | 0.01% | 0.003% |
| 4 | 4.159 | 4.129 | 4.191 | VV | 2191 | 31227 | 0.35% | 0.097% |
| 5 | 4.195 | 4.191 | 4.204 | VV | 341 | 1699 | 0.02% | 0.005% |
| 6 | 4.218 | 4.204 | 4.232 | PV | 288 | 2452 | 0.03% | 0.008% |
| 7 | 4.263 | 4.232 | 4.283 | VV | 899 | 12413 | 0.14% | 0.039% |
| 8 | 4.315 | 4.283 | 4.352 | VV | 4095 | 49271 | 0.56% | 0.154% |
| 9 | 4.370 | 4.352 | 4.383 | VV | 3375 | 34655 | 0.39% | 0.108% |
| 10 | 4.399 | 4.383 | 4.442 | VV | 6224 | 73782 | 0.84% | 0.230% |
| 11 | 4.446 | 4.442 | 4.455 | VV | 321 | 1587 | 0.02% | 0.005% |
| 12 | 4.462 | 4.455 | 4.471 | VV | 282 | 2092 | 0.02% | 0.007% |
| 13 | 4.486 | 4.471 | 4.498 | VV | 810 | 9274 | 0.10% | 0.029% |
| 14 | 4.512 | 4.498 | 4.563 | VV | 889 | 17139 | 0.19% | 0.054% |
| 15 | 4.585 | 4.563 | 4.609 | VV | 931 | 14130 | 0.16% | 0.044% |
| 16 | 4.614 | 4.609 | 4.642 | VV | 696 | 4517 | 0.05% | 0.014% |
| 17 | 4.654 | 4.651 | 4.665 | VV | 229 | 1270 | 0.01% | 0.004% |
| 18 | 4.691 | 4.665 | 4.709 | VV | 677 | 8921 | 0.10% | 0.028% |
| 19 | 4.717 | 4.709 | 4.722 | VV | 263 | 1417 | 0.02% | 0.004% |
| 20 | 4.768 | 4.722 | 4.810 | VV | 11657 | 165568 | 1.87% | 0.517% |
| 21 | 4.826 | 4.810 | 4.877 | VV | 2372 | 33180 | 0.38% | 0.104% |
| 22 | 4.892 | 4.877 | 4.906 | VV | 266 | 2858 | 0.03% | 0.009% |
| 23 | 4.926 | 4.906 | 4.951 | VV | 265 | 4369 | 0.05% | 0.014% |
| 24 | 4.971 | 4.951 | 4.989 | VV | 618 | 7573 | 0.09% | 0.024% |
| 25 | 4.995 | 4.989 | 5.020 | VV | 323 | 3293 | 0.04% | 0.010% |
| 26 | 5.030 | 5.020 | 5.037 | VV | 225 | 1175 | 0.01% | 0.004% |
| 27 | 5.049 | 5.037 | 5.053 | VV | 214 | 1299 | 0.01% | 0.004% |
| 28 | 5.079 | 5.053 | 5.126 | VV | 1043 | 29794 | 0.34% | 0.093% |
| 29 | 5.137 | 5.126 | 5.161 | VV | 985 | 13251 | 0.15% | 0.041% |
| 30 | 5.178 | 5.161 | 5.195 | VV | 1585 | 21891 | 0.25% | 0.068% |
| 31 | 5.212 | 5.195 | 5.236 | VV | 3835 | 45478 | 0.51% | 0.142% |
| 32 | 5.240 | 5.236 | 5.252 | VV | 557 | 4081 | 0.05% | 0.013% |
| 33 | 5.268 | 5.252 | 5.300 | VV | 1074 | 15878 | 0.18% | 0.050% |
| 34 | 5.314 | 5.300 | 5.322 | VV | 309 | 3048 | 0.03% | 0.010% |
| 35 | 5.344 | 5.322 | 5.385 | VV | 577 | 14348 | 0.16% | 0.045% |
| 36 | 5.392 | 5.385 | 5.403 | VV | 349 | 2364 | 0.03% | 0.007% |

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|---|---|---|---|---|---|---|---|---|
| 37 | 5.418 | 5.403 | 5.436 | VV | 458 | 4390 | 0.05% | 0.014% |
| 38 | 5.444 | 5.436 | 5.449 | VV | 195 | 1271 | 0.01% | 0.004% |
| 39 | 5.464 | 5.449 | 5.483 | VV | 482 | 5846 | 0.07% | 0.018% |
| 40 | 5.495 | 5.483 | 5.504 | VV | 309 | 1939 | 0.02% | 0.006% |
| 41 | 5.517 | 5.504 | 5.522 | VV | 296 | 1860 | 0.02% | 0.006% |
| 42 | 5.529 | 5.522 | 5.543 | VV | 293 | 2332 | 0.03% | 0.007% |
| 43 | 5.575 | 5.543 | 5.623 | PV | 480 | 11080 | 0.13% | 0.035% |
| 44 | 5.642 | 5.623 | 5.652 | VV | 193 | 2004 | 0.02% | 0.006% |
| 45 | 5.696 | 5.667 | 5.715 | VV | 444 | 7353 | 0.08% | 0.023% |
| 46 | 5.729 | 5.715 | 5.759 | VV | 637 | 9544 | 0.11% | 0.030% |
| 47 | 5.769 | 5.759 | 5.790 | VV | 1000 | 12127 | 0.14% | 0.038% |
| 48 | 5.813 | 5.790 | 5.845 | VV | 2409 | 39278 | 0.44% | 0.123% |
| 49 | 5.851 | 5.845 | 5.859 | VV | 745 | 5268 | 0.06% | 0.016% |
| 50 | 5.871 | 5.859 | 5.904 | VV | 933 | 17385 | 0.20% | 0.054% |
| 51 | 5.940 | 5.904 | 5.982 | VV | 1144 | 27868 | 0.32% | 0.087% |
| 52 | 5.987 | 5.982 | 5.992 | VV | 248 | 1081 | 0.01% | 0.003% |
| 53 | 6.005 | 5.992 | 6.034 | VV | 319 | 4372 | 0.05% | 0.014% |
| 54 | 6.055 | 6.034 | 6.070 | VV | 258 | 3067 | 0.03% | 0.010% |
| 55 | 6.118 | 6.090 | 6.126 | PV | 493 | 6267 | 0.07% | 0.020% |
| 56 | 6.153 | 6.126 | 6.202 | VV | 2757 | 54120 | 0.61% | 0.169% |
| 57 | 6.221 | 6.202 | 6.248 | VV | 1839 | 23961 | 0.27% | 0.075% |
| 58 | 6.263 | 6.248 | 6.276 | VV | 1052 | 11509 | 0.13% | 0.036% |
| 59 | 6.294 | 6.276 | 6.346 | VV | 3083 | 49943 | 0.57% | 0.156% |
| 60 | 6.367 | 6.346 | 6.390 | VV | 1839 | 24259 | 0.27% | 0.076% |
| 61 | 6.394 | 6.390 | 6.402 | VV | 296 | 1775 | 0.02% | 0.006% |
| 62 | 6.405 | 6.402 | 6.409 | VV | 367 | 1304 | 0.01% | 0.004% |
| 63 | 6.415 | 6.409 | 6.436 | VV | 398 | 4225 | 0.05% | 0.013% |
| 64 | 6.454 | 6.436 | 6.459 | VV | 317 | 3381 | 0.04% | 0.011% |
| 65 | 6.464 | 6.459 | 6.493 | VV | 366 | 5543 | 0.06% | 0.017% |
| 66 | 6.507 | 6.493 | 6.542 | VV | 381 | 5814 | 0.07% | 0.018% |
| 67 | 6.545 | 6.542 | 6.560 | VV | 208 | 1285 | 0.01% | 0.004% |
| 68 | 6.579 | 6.560 | 6.610 | VV | 1665 | 20098 | 0.23% | 0.063% |
| 69 | 6.632 | 6.610 | 6.657 | VV | 1550 | 26383 | 0.30% | 0.082% |
| 70 | 6.679 | 6.657 | 6.695 | VV | 1960 | 31997 | 0.36% | 0.100% |
| 71 | 6.705 | 6.695 | 6.732 | VV | 1393 | 17596 | 0.20% | 0.055% |
| 72 | 6.758 | 6.732 | 6.789 | VV | 3124 | 42701 | 0.48% | 0.133% |
| 73 | 6.792 | 6.789 | 6.815 | VV | 336 | 2893 | 0.03% | 0.009% |
| 74 | 6.833 | 6.815 | 6.849 | VV | 694 | 7996 | 0.09% | 0.025% |
| 75 | 6.858 | 6.849 | 6.878 | VV | 694 | 6936 | 0.08% | 0.022% |
| 76 | 6.884 | 6.878 | 6.890 | VV | 323 | 1829 | 0.02% | 0.006% |
| 77 | 6.914 | 6.890 | 6.951 | VV | 7097 | 79049 | 0.90% | 0.247% |
| 78 | 6.987 | 6.951 | 7.007 | VV | 1133 | 22427 | 0.25% | 0.070% |
| 79 | 7.024 | 7.007 | 7.048 | VV | 1388 | 23775 | 0.27% | 0.074% |
| 80 | 7.062 | 7.048 | 7.082 | VV | 1461 | 18111 | 0.21% | 0.057% |
| 81 | 7.087 | 7.082 | 7.101 | VV | 590 | 5891 | 0.07% | 0.018% |
| 82 | 7.117 | 7.101 | 7.132 | VV | 983 | 13754 | 0.16% | 0.043% |
| 83 | 7.145 | 7.132 | 7.184 | VV | 1458 | 19396 | 0.22% | 0.061% |
| 84 | 7.207 | 7.184 | 7.242 | VV | 489 | 8565 | 0.10% | 0.027% |
| 85 | 7.267 | 7.242 | 7.272 | PV | 358 | 3383 | 0.04% | 0.011% |
| 86 | 7.282 | 7.272 | 7.291 | VV | 275 | 2290 | 0.03% | 0.007% |
| 87 | 7.314 | 7.291 | 7.328 | VV | 2313 | 26279 | 0.30% | 0.082% |
| 88 | 7.353 | 7.328 | 7.564 | VV | 855551 | 8713654 | 98.66% | 27.204% |
| 89 | 7.569 | 7.564 | 7.573 | VV | 888 | 4426 | 0.05% | 0.014% |

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|---|---|---|---|---|---|---|---|---|
| 90 | 7.581 | 7.573 | 7.603 | VV | 1155 | 14546 | 0.16% | 0.045% |
| 91 | 7.623 | 7.603 | 7.652 | VV | 1736 | 25707 | 0.29% | 0.080% |
| 92 | 7.656 | 7.652 | 7.661 | VV | 449 | 2145 | 0.02% | 0.007% |
| 93 | 7.683 | 7.661 | 7.699 | VV | 703 | 11606 | 0.13% | 0.036% |
| 94 | 7.714 | 7.699 | 7.735 | VV | 915 | 14855 | 0.17% | 0.046% |
| 95 | 7.744 | 7.735 | 7.781 | VV | 484 | 9215 | 0.10% | 0.029% |
| 96 | 7.787 | 7.781 | 7.790 | VV | 249 | 1424 | 0.02% | 0.004% |
| 97 | 7.804 | 7.790 | 7.824 | VV | 431 | 6299 | 0.07% | 0.020% |
| 98 | 7.836 | 7.824 | 7.850 | VV | 580 | 6217 | 0.07% | 0.019% |
| 99 | 7.866 | 7.850 | 7.887 | VV | 881 | 13147 | 0.15% | 0.041% |
| 100 | 7.893 | 7.887 | 7.900 | VV | 556 | 3662 | 0.04% | 0.011% |
| 101 | 7.921 | 7.900 | 7.942 | VV | 2914 | 37733 | 0.43% | 0.118% |
| 102 | 7.951 | 7.942 | 7.995 | VV | 855 | 12383 | 0.14% | 0.039% |
| 103 | 8.017 | 7.995 | 8.023 | VV | 1092 | 11332 | 0.13% | 0.035% |
| 104 | 8.031 | 8.023 | 8.054 | VV | 1151 | 16988 | 0.19% | 0.053% |
| 105 | 8.065 | 8.054 | 8.090 | VV | 1104 | 14651 | 0.17% | 0.046% |
| 106 | 8.112 | 8.090 | 8.129 | VV | 1282 | 15559 | 0.18% | 0.049% |
| 107 | 8.148 | 8.129 | 8.177 | VV | 1293 | 15396 | 0.17% | 0.048% |
| 108 | 8.203 | 8.177 | 8.363 | VV | 423197 | 5601765 | 63.43% | 17.489% |
| 109 | 8.376 | 8.363 | 8.402 | VV | 3455 | 68469 | 0.78% | 0.214% |
| 110 | 8.413 | 8.402 | 8.440 | VV | 2396 | 50891 | 0.58% | 0.159% |
| 111 | 8.458 | 8.440 | 8.497 | VV | 2957 | 76136 | 0.86% | 0.238% |
| 112 | 8.515 | 8.497 | 8.533 | VV | 1552 | 27596 | 0.31% | 0.086% |
| 113 | 8.538 | 8.533 | 8.546 | VV | 921 | 7016 | 0.08% | 0.022% |
| 114 | 8.567 | 8.546 | 8.595 | VV | 1381 | 31877 | 0.36% | 0.100% |
| 115 | 8.637 | 8.595 | 8.713 | VV | 81988 | 955442 | 10.82% | 2.983% |
| 116 | 8.746 | 8.713 | 8.806 | VV | 6303 | 127364 | 1.44% | 0.398% |
| 117 | 8.826 | 8.806 | 8.852 | VV | 1778 | 33102 | 0.37% | 0.103% |
| 118 | 8.871 | 8.852 | 8.899 | VV | 1320 | 24522 | 0.28% | 0.077% |
| 119 | 8.912 | 8.899 | 8.917 | VV | 590 | 5568 | 0.06% | 0.017% |
| 120 | 8.928 | 8.917 | 8.938 | VV | 679 | 7466 | 0.08% | 0.023% |
| 121 | 8.947 | 8.938 | 8.964 | VV | 831 | 10372 | 0.12% | 0.032% |
| 122 | 8.972 | 8.964 | 8.980 | VV | 684 | 5954 | 0.07% | 0.019% |
| 123 | 8.990 | 8.980 | 9.002 | VV | 575 | 7154 | 0.08% | 0.022% |
| 124 | 9.019 | 9.002 | 9.033 | VV | 990 | 15348 | 0.17% | 0.048% |
| 125 | 9.039 | 9.033 | 9.068 | VV | 897 | 13809 | 0.16% | 0.043% |
| 126 | 9.096 | 9.068 | 9.123 | VV | 1544 | 29751 | 0.34% | 0.093% |
| 127 | 9.129 | 9.123 | 9.153 | VV | 575 | 7032 | 0.08% | 0.022% |
| 128 | 9.164 | 9.153 | 9.195 | VV | 527 | 11283 | 0.13% | 0.035% |
| 129 | 9.201 | 9.195 | 9.212 | VV | 612 | 4789 | 0.05% | 0.015% |
| 130 | 9.217 | 9.212 | 9.223 | VV | 458 | 2537 | 0.03% | 0.008% |
| 131 | 9.248 | 9.223 | 9.264 | VV | 1041 | 15430 | 0.17% | 0.048% |
| 132 | 9.307 | 9.264 | 9.312 | VV | 559 | 10414 | 0.12% | 0.033% |
| 133 | 9.317 | 9.312 | 9.327 | VV | 512 | 3809 | 0.04% | 0.012% |
| 134 | 9.340 | 9.327 | 9.362 | VV | 537 | 7106 | 0.08% | 0.022% |
| 135 | 9.371 | 9.362 | 9.385 | VV | 490 | 5872 | 0.07% | 0.018% |
| 136 | 9.392 | 9.385 | 9.410 | VV | 549 | 6132 | 0.07% | 0.019% |
| 137 | 9.414 | 9.410 | 9.424 | VV | 360 | 2001 | 0.02% | 0.006% |
| 138 | 9.428 | 9.424 | 9.431 | VV | 339 | 1422 | 0.02% | 0.004% |
| 139 | 9.444 | 9.431 | 9.458 | VV | 609 | 7189 | 0.08% | 0.022% |
| 140 | 9.464 | 9.458 | 9.483 | VV | 486 | 4519 | 0.05% | 0.014% |
| 141 | 9.519 | 9.483 | 9.560 | VV | 1819 | 32994 | 0.37% | 0.103% |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 142 | 9.586 | 9.560 | 9.595 | VV | 809 | 11053 | 0.13% | 0.035% |
| 143 | 9.600 | 9.595 | 9.631 | VV | 746 | 12568 | 0.14% | 0.039% |
| 144 | 9.657 | 9.631 | 9.668 | VV | 564 | 9259 | 0.10% | 0.029% |
| 145 | 9.690 | 9.668 | 9.712 | VV | 514 | 7356 | 0.08% | 0.023% |
| 146 | 9.735 | 9.717 | 9.740 | PV | 233 | 1974 | 0.02% | 0.006% |
| 147 | 9.765 | 9.740 | 9.777 | VV | 521 | 8010 | 0.09% | 0.025% |
| 148 | 9.786 | 9.777 | 9.797 | VV | 537 | 5186 | 0.06% | 0.016% |
| 149 | 9.823 | 9.797 | 9.849 | VV | 1859 | 32248 | 0.37% | 0.101% |
| 150 | 9.864 | 9.849 | 9.876 | VV | 753 | 9680 | 0.11% | 0.030% |
| 151 | 9.901 | 9.876 | 9.921 | VV | 801 | 16922 | 0.19% | 0.053% |
| 152 | 9.948 | 9.921 | 9.959 | VV | 780 | 13364 | 0.15% | 0.042% |
| 153 | 9.974 | 9.959 | 9.986 | VV | 854 | 10994 | 0.12% | 0.034% |
| 154 | 9.990 | 9.986 | 9.997 | VV | 766 | 4613 | 0.05% | 0.014% |
| 155 | 10.015 | 9.997 | 10.039 | VV | 1395 | 20701 | 0.23% | 0.065% |
| 156 | 10.044 | 10.039 | 10.054 | VV | 554 | 3490 | 0.04% | 0.011% |
| 157 | 10.063 | 10.054 | 10.084 | VV | 459 | 6328 | 0.07% | 0.020% |
| 158 | 10.102 | 10.084 | 10.118 | VV | 986 | 14260 | 0.16% | 0.045% |
| 159 | 10.141 | 10.118 | 10.156 | VV | 785 | 13243 | 0.15% | 0.041% |
| 160 | 10.185 | 10.156 | 10.207 | VV | 1502 | 26886 | 0.30% | 0.084% |
| 161 | 10.214 | 10.207 | 10.230 | VV | 803 | 9652 | 0.11% | 0.030% |
| 162 | 10.253 | 10.230 | 10.282 | VV | 1498 | 29442 | 0.33% | 0.092% |
| 163 | 10.295 | 10.282 | 10.312 | VV | 1106 | 12892 | 0.15% | 0.040% |
| 164 | 10.327 | 10.312 | 10.340 | VV | 896 | 11847 | 0.13% | 0.037% |
| 165 | 10.363 | 10.340 | 10.386 | VV | 2800 | 42678 | 0.48% | 0.133% |
| 166 | 10.403 | 10.386 | 10.418 | VV | 619 | 10144 | 0.11% | 0.032% |
| 167 | 10.431 | 10.418 | 10.437 | VV | 770 | 7429 | 0.08% | 0.023% |
| 168 | 10.452 | 10.437 | 10.475 | VV | 1005 | 17072 | 0.19% | 0.053% |
| 169 | 10.491 | 10.475 | 10.507 | VV | 649 | 10086 | 0.11% | 0.031% |
| 170 | 10.514 | 10.507 | 10.520 | VV | 486 | 2843 | 0.03% | 0.009% |
| 171 | 10.530 | 10.520 | 10.550 | VV | 532 | 6468 | 0.07% | 0.020% |
| 172 | 10.572 | 10.550 | 10.585 | VV | 473 | 8314 | 0.09% | 0.026% |
| 173 | 10.602 | 10.585 | 10.622 | VV | 585 | 8697 | 0.10% | 0.027% |
| 174 | 10.634 | 10.622 | 10.645 | VV | 640 | 6730 | 0.08% | 0.021% |
| 175 | 10.659 | 10.645 | 10.689 | VV | 1382 | 19953 | 0.23% | 0.062% |
| 176 | 10.699 | 10.689 | 10.713 | VV | 515 | 5810 | 0.07% | 0.018% |
| 177 | 10.722 | 10.713 | 10.790 | VV | 374 | 14803 | 0.17% | 0.046% |
| 178 | 10.803 | 10.790 | 10.832 | VV | 332 | 6823 | 0.08% | 0.021% |
| 179 | 10.847 | 10.832 | 10.855 | VV | 376 | 4430 | 0.05% | 0.014% |
| 180 | 10.877 | 10.855 | 10.912 | VV | 1605 | 24267 | 0.27% | 0.076% |
| 181 | 10.943 | 10.912 | 10.976 | VV | 2271 | 36498 | 0.41% | 0.114% |
| 182 | 10.987 | 10.976 | 11.008 | VV | 598 | 8123 | 0.09% | 0.025% |
| 183 | 11.030 | 11.008 | 11.060 | VV | 1361 | 22288 | 0.25% | 0.070% |
| 184 | 11.082 | 11.060 | 11.112 | VV | 1304 | 20186 | 0.23% | 0.063% |
| 185 | 11.127 | 11.112 | 11.138 | VV | 348 | 3073 | 0.03% | 0.010% |
| 186 | 11.155 | 11.138 | 11.174 | VV | 478 | 6807 | 0.08% | 0.021% |
| 187 | 11.180 | 11.174 | 11.198 | VV | 493 | 3832 | 0.04% | 0.012% |
| 188 | 11.237 | 11.198 | 11.337 | PV | 798997 | 8832006 | 100.00% | 27.574% |
| 189 | 11.346 | 11.337 | 11.384 | VV | 1443 | 28424 | 0.32% | 0.089% |
| 190 | 11.409 | 11.384 | 11.447 | VV | 2766 | 46665 | 0.53% | 0.146% |
| 191 | 11.452 | 11.447 | 11.468 | VV | 503 | 5604 | 0.06% | 0.017% |
| 192 | 11.479 | 11.468 | 11.486 | VV | 461 | 4520 | 0.05% | 0.014% |
| 193 | 11.529 | 11.486 | 11.542 | VV | 600 | 16842 | 0.19% | 0.053% |
| 194 | 11.569 | 11.542 | 11.578 | VV | 1052 | 17374 | 0.20% | 0.054% |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 195 | 11.593 | 11.578 | 11.629 | VV | 1250 | 29648 | 0.34% | 0.093% |
| 196 | 11.666 | 11.629 | 11.718 | VV | 9288 | 151147 | 1.71% | 0.472% |
| 197 | 11.736 | 11.718 | 11.778 | VV | 1067 | 25842 | 0.29% | 0.081% |
| 198 | 11.815 | 11.778 | 11.842 | VV | 2079 | 46244 | 0.52% | 0.144% |
| 199 | 11.862 | 11.842 | 11.965 | VV | 22423 | 414472 | 4.69% | 1.294% |
| 200 | 12.016 | 11.965 | 12.059 | VV | 1372 | 63909 | 0.72% | 0.200% |
| 201 | 12.103 | 12.059 | 12.149 | VV | 9046 | 144405 | 1.64% | 0.451% |
| 202 | 12.179 | 12.149 | 12.208 | VV | 2108 | 36394 | 0.41% | 0.114% |
| 203 | 12.240 | 12.208 | 12.264 | VV | 2565 | 38931 | 0.44% | 0.122% |
| 204 | 12.275 | 12.264 | 12.287 | VV | 630 | 7721 | 0.09% | 0.024% |
| 205 | 12.309 | 12.287 | 12.359 | VV | 1681 | 31359 | 0.36% | 0.098% |
| 206 | 12.373 | 12.359 | 12.399 | VV | 580 | 7339 | 0.08% | 0.023% |
| 207 | 12.420 | 12.399 | 12.449 | VV | 207 | 3942 | 0.04% | 0.012% |
| 208 | 12.492 | 12.449 | 12.522 | PV | 518 | 15846 | 0.18% | 0.049% |
| 209 | 12.524 | 12.522 | 12.547 | VV | 501 | 5376 | 0.06% | 0.017% |
| 210 | 12.561 | 12.547 | 12.572 | VV | 522 | 4805 | 0.05% | 0.015% |
| 211 | 12.604 | 12.572 | 12.624 | VV | 490 | 11515 | 0.13% | 0.036% |
| 212 | 12.676 | 12.624 | 12.774 | VV | 172305 | 2113446 | 23.93% | 6.598% |
| 213 | 12.843 | 12.774 | 12.854 | VV | 887 | 28615 | 0.32% | 0.089% |
| 214 | 12.864 | 12.854 | 12.884 | VV | 746 | 12464 | 0.14% | 0.039% |
| 215 | 12.914 | 12.884 | 12.982 | VV | 5868 | 105116 | 1.19% | 0.328% |
| 216 | 12.992 | 12.982 | 13.018 | VV | 647 | 11191 | 0.13% | 0.035% |
| 217 | 13.039 | 13.018 | 13.047 | VV | 893 | 12480 | 0.14% | 0.039% |
| 218 | 13.055 | 13.047 | 13.077 | VV | 940 | 12665 | 0.14% | 0.040% |
| 219 | 13.104 | 13.077 | 13.227 | VV | 4604 | 165391 | 1.87% | 0.516% |
| 220 | 13.232 | 13.227 | 13.244 | VV | 824 | 8156 | 0.09% | 0.025% |
| 221 | 13.266 | 13.244 | 13.281 | VV | 997 | 18270 | 0.21% | 0.057% |
| 222 | 13.300 | 13.281 | 13.355 | VV | 971 | 32248 | 0.37% | 0.101% |
| 223 | 13.381 | 13.355 | 13.405 | VV | 1620 | 29496 | 0.33% | 0.092% |
| 224 | 13.432 | 13.405 | 13.472 | VV | 2455 | 38677 | 0.44% | 0.121% |
| 225 | 13.500 | 13.472 | 13.524 | VV | 441 | 9446 | 0.11% | 0.029% |
| 226 | 13.536 | 13.524 | 13.549 | VV | 323 | 4116 | 0.05% | 0.013% |
| 227 | 13.560 | 13.549 | 13.605 | VV | 384 | 8083 | 0.09% | 0.025% |
| 228 | 13.615 | 13.605 | 13.661 | VV | 278 | 5860 | 0.07% | 0.018% |
| 229 | 13.671 | 13.661 | 13.693 | PV | 317 | 3548 | 0.04% | 0.011% |
| 230 | 13.704 | 13.693 | 13.712 | VV | 254 | 2433 | 0.03% | 0.008% |
| 231 | 13.724 | 13.712 | 13.737 | VV | 391 | 3542 | 0.04% | 0.011% |
| 232 | 13.760 | 13.737 | 13.772 | VV | 345 | 5746 | 0.07% | 0.018% |
| 233 | 13.781 | 13.772 | 13.791 | VV | 396 | 3107 | 0.04% | 0.010% |
| 234 | 13.799 | 13.791 | 13.807 | VV | 315 | 2557 | 0.03% | 0.008% |
| 235 | 13.831 | 13.807 | 13.852 | VV | 460 | 7426 | 0.08% | 0.023% |
| 236 | 13.892 | 13.852 | 13.936 | VV | 1312 | 37321 | 0.42% | 0.117% |
| 237 | 13.950 | 13.936 | 13.960 | VV | 476 | 6378 | 0.07% | 0.020% |
| 238 | 13.968 | 13.960 | 13.984 | VV | 623 | 6536 | 0.07% | 0.020% |
| 239 | 13.995 | 13.984 | 14.019 | VV | 510 | 9178 | 0.10% | 0.029% |
| 240 | 14.080 | 14.019 | 14.114 | VV | 637 | 25632 | 0.29% | 0.080% |
| 241 | 14.121 | 14.114 | 14.142 | VV | 546 | 8594 | 0.10% | 0.027% |
| 242 | 14.162 | 14.142 | 14.172 | VV | 656 | 9678 | 0.11% | 0.030% |
| 243 | 14.195 | 14.172 | 14.223 | VV | 791 | 17689 | 0.20% | 0.055% |
| 244 | 14.245 | 14.223 | 14.263 | VV | 636 | 12718 | 0.14% | 0.040% |
| 245 | 14.294 | 14.263 | 14.319 | VV | 865 | 19945 | 0.23% | 0.062% |
| 246 | 14.336 | 14.319 | 14.364 | VV | 746 | 14623 | 0.17% | 0.046% |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 247 | 14.395 | 14.364 | 14.424 | VV | 513 | 13066 | 0.15% | 0.041% |
| 248 | 14.450 | 14.424 | 14.459 | VV | 390 | 5481 | 0.06% | 0.017% |
| 249 | 14.490 | 14.459 | 14.510 | VV | 1364 | 21985 | 0.25% | 0.069% |
| 250 | 14.533 | 14.510 | 14.625 | VV | 2234 | 46838 | 0.53% | 0.146% |
| 251 | 14.653 | 14.625 | 14.665 | VV | 255 | 3668 | 0.04% | 0.011% |
| 252 | 14.696 | 14.665 | 14.729 | VV | 1044 | 18176 | 0.21% | 0.057% |
| 253 | 14.738 | 14.729 | 14.752 | VV | 331 | 3623 | 0.04% | 0.011% |
| 254 | 14.762 | 14.752 | 14.819 | VV | 189 | 7155 | 0.08% | 0.022% |
| 255 | 14.836 | 14.819 | 14.858 | PV | 315 | 5218 | 0.06% | 0.016% |
| 256 | 14.871 | 14.858 | 14.917 | VV | 556 | 11435 | 0.13% | 0.036% |
| 257 | 14.957 | 14.917 | 14.976 | VV | 531 | 12119 | 0.14% | 0.038% |
| 258 | 15.010 | 14.976 | 15.029 | VV | 499 | 10966 | 0.12% | 0.034% |
| 259 | 15.078 | 15.029 | 15.132 | VV | 1885 | 46295 | 0.52% | 0.145% |
| 260 | 15.141 | 15.132 | 15.149 | VV | 397 | 3014 | 0.03% | 0.009% |
| 261 | 15.181 | 15.149 | 15.211 | VV | 572 | 15615 | 0.18% | 0.049% |
| 262 | 15.244 | 15.211 | 15.308 | VV | 1083 | 29625 | 0.34% | 0.092% |
| 263 | 15.393 | 15.308 | 15.429 | VV | 1028 | 33762 | 0.38% | 0.105% |
| 264 | 15.437 | 15.429 | 15.480 | VV | 460 | 6480 | 0.07% | 0.020% |
| 265 | 15.515 | 15.480 | 15.532 | VV | 983 | 15803 | 0.18% | 0.049% |
| 266 | 15.551 | 15.532 | 15.572 | VV | 1791 | 27606 | 0.31% | 0.086% |
| 267 | 15.591 | 15.572 | 15.619 | VV | 893 | 15236 | 0.17% | 0.048% |
| 268 | 15.627 | 15.619 | 15.666 | VV | 298 | 4755 | 0.05% | 0.015% |
| 269 | 15.688 | 15.666 | 15.710 | VV | 299 | 2931 | 0.03% | 0.009% |
| 270 | 15.761 | 15.710 | 15.774 | PV | 331 | 5722 | 0.06% | 0.018% |
| 271 | 15.803 | 15.774 | 15.829 | VV | 262 | 4445 | 0.05% | 0.014% |
| 272 | 15.838 | 15.829 | 15.849 | PV | 241 | 1886 | 0.02% | 0.006% |
| 273 | 15.858 | 15.849 | 15.884 | VV | 239 | 3147 | 0.04% | 0.010% |
| 274 | 15.893 | 15.884 | 15.902 | VV | 198 | 1845 | 0.02% | 0.006% |
| 275 | 15.914 | 15.902 | 15.925 | VV | 264 | 3124 | 0.04% | 0.010% |
| 276 | 15.934 | 15.925 | 15.969 | VV | 380 | 5690 | 0.06% | 0.018% |
| 277 | 16.000 | 15.969 | 16.010 | VV | 365 | 6105 | 0.07% | 0.019% |
| 278 | 16.034 | 16.010 | 16.081 | VV | 843 | 17484 | 0.20% | 0.055% |
| 279 | 16.099 | 16.081 | 16.107 | VV | 394 | 3753 | 0.04% | 0.012% |
| 280 | 16.134 | 16.107 | 16.156 | VV | 1077 | 20955 | 0.24% | 0.065% |
| 281 | 16.164 | 16.156 | 16.217 | VV | 633 | 17150 | 0.19% | 0.054% |
| 282 | 16.227 | 16.217 | 16.255 | VV | 551 | 9670 | 0.11% | 0.030% |
| 283 | 16.263 | 16.255 | 16.289 | VV | 397 | 6792 | 0.08% | 0.021% |
| 284 | 16.329 | 16.289 | 16.362 | VV | 669 | 22659 | 0.26% | 0.071% |
| 285 | 16.413 | 16.362 | 16.434 | VV | 859 | 26226 | 0.30% | 0.082% |
| 286 | 16.456 | 16.434 | 16.475 | VV | 1195 | 19621 | 0.22% | 0.061% |
| 287 | 16.494 | 16.475 | 16.527 | VV | 2132 | 37062 | 0.42% | 0.116% |
| 288 | 16.541 | 16.527 | 16.556 | VV | 368 | 6400 | 0.07% | 0.020% |
| 289 | 16.564 | 16.556 | 16.579 | VV | 413 | 4488 | 0.05% | 0.014% |
| 290 | 16.585 | 16.579 | 16.632 | VV | 489 | 10402 | 0.12% | 0.032% |
| 291 | 16.659 | 16.632 | 16.689 | VV | 402 | 10109 | 0.11% | 0.032% |
| 292 | 16.701 | 16.689 | 16.732 | VV | 310 | 5370 | 0.06% | 0.017% |
| 293 | 16.832 | 16.732 | 16.862 | VV | 468 | 26693 | 0.30% | 0.083% |
| 294 | 16.869 | 16.862 | 16.894 | VV | 495 | 7560 | 0.09% | 0.024% |
| 295 | 16.944 | 16.894 | 16.994 | VV | 2444 | 51120 | 0.58% | 0.160% |
| 296 | 17.050 | 16.994 | 17.078 | PV | 572 | 18447 | 0.21% | 0.058% |
| 297 | 17.099 | 17.078 | 17.114 | VV | 521 | 8534 | 0.10% | 0.027% |
| 298 | 17.143 | 17.114 | 17.162 | VV | 510 | 11011 | 0.12% | 0.034% |
| 299 | 17.188 | 17.162 | 17.202 | VV | 541 | 10780 | 0.12% | 0.034% |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | rteres | | | |
| 300 | 17.209 | 17.202 | 17.220 | VV | 441 | 4498 | 0.05% | 0.014% |
| 301 | 17.224 | 17.220 | 17.234 | VV | 485 | 3199 | 0.04% | 0.010% |
| 302 | 17.242 | 17.234 | 17.250 | VV | 398 | 3159 | 0.04% | 0.010% |
| 303 | 17.268 | 17.250 | 17.284 | VV | 513 | 7155 | 0.08% | 0.022% |
| 304 | 17.295 | 17.284 | 17.305 | VV | 366 | 4028 | 0.05% | 0.013% |
| 305 | 17.376 | 17.305 | 17.438 | VV | 4228 | 93509 | 1.06% | 0.292% |
| 306 | 17.462 | 17.438 | 17.492 | VV | 399 | 10269 | 0.12% | 0.032% |
| 307 | 17.529 | 17.492 | 17.570 | VV | 463 | 14511 | 0.16% | 0.045% |
| 308 | 17.584 | 17.570 | 17.597 | VV | 255 | 2649 | 0.03% | 0.008% |
| 309 | 17.628 | 17.597 | 17.642 | VV | 326 | 5187 | 0.06% | 0.016% |
| 310 | 17.661 | 17.642 | 17.673 | VV | 397 | 5468 | 0.06% | 0.017% |
| 311 | 17.685 | 17.673 | 17.719 | VV | 403 | 6994 | 0.08% | 0.022% |
| 312 | 17.725 | 17.719 | 17.770 | VV | 260 | 4833 | 0.05% | 0.015% |
| 313 | 17.798 | 17.770 | 17.855 | VV | 3449 | 58209 | 0.66% | 0.182% |
| 314 | 17.862 | 17.855 | 17.898 | VV | 377 | 6140 | 0.07% | 0.019% |
| 315 | 17.930 | 17.898 | 17.943 | VV | 385 | 5892 | 0.07% | 0.018% |
| 316 | 17.967 | 17.943 | 17.981 | PV | 235 | 3030 | 0.03% | 0.009% |
| 317 | 18.015 | 17.981 | 18.045 | VV | 330 | 7517 | 0.09% | 0.023% |
| 318 | 18.063 | 18.045 | 18.132 | VV | 518 | 16178 | 0.18% | 0.051% |
| 319 | 18.205 | 18.132 | 18.272 | VV | 4144 | 83959 | 0.95% | 0.262% |
| | | | Sum of corrected areas: | | | 32030510 | | |

Aromatic EPH 021125.M Fri Feb 28 02:07:40 2025

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Weston Solutions, Inc. | Date Collected: | 02/24/25 |
| Project: | RFP 905 | Date Received: | 02/24/25 |
| Client Sample ID: | P001-CLAY-CF01-02 | SDG No.: | Q1421 |
| Lab Sample ID: | Q1421-07 | Matrix: | Solid |
| Analytical Method: | NJEPH | % Solid: | 75.2 |
| Sample Wt/Vol: | 30.06 Units: g | Final Vol: | 2000 uL |
| Soil Aliquot Vol: | uL | Test: | EPH |
| Prep Method : | | | |

| Prep Date : | Date Analyzed : | Prep Batch ID |
|---|---|---|
| 02/27/25 13:10 | 02/28/25 15:16 | PB166923 |

| CAS Number | Parameter | Conc. | Qualifier | Dilution | MDL | LOQ / CRQL | Units(Dry Weight) | Datafile |
|---|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | | |
| Aliphatic C9-C12 | Aliphatic C9-C12 | 0.50 | U | 1 | 0.50 | 1.33 | mg/kg | FC068329.D |
| Aliphatic C12-C16 | Aliphatic C12-C16 | 0.72 | J | 1 | 0.32 | 0.89 | mg/kg | FC068329.D |
| Aliphatic C16-C21 | Aliphatic C16-C21 | 0.60 | J | 1 | 0.40 | 1.33 | mg/kg | FC068329.D |
| Aliphatic C21-C28 | Aliphatic C21-C28 | 1.06 | U | 1 | 1.06 | 1.77 | mg/kg | FC068329.D |
| Aliphatic C28-C40 | Aliphatic C28-C40 | 2.54 | J | 1 | 2.39 | 2.65 | mg/kg | FC068329.D |
| Aromatic C10-C12 | Aromatic C10-C12 | 0.43 | J | 1 | 0.40 | 0.89 | mg/kg | FD049137.D |
| Aromatic C12-C16 | Aromatic C12-C16 | 0.63 | J | 1 | 0.45 | 1.33 | mg/kg | FD049137.D |
| Aromatic C16-C21 | Aromatic C16-C21 | 2.48 | | 1 | 1.27 | 2.21 | mg/kg | FD049137.D |
| Aromatic C21-C36 | Aromatic C21-C36 | 3.08 | J | 1 | 2.65 | 3.54 | mg/kg | FD049137.D |
| Total AliphaticEPH | Total AliphaticEPH | 4.67 | U | | 4.67 | 7.96 | mg/kg | |
| Total AromaticEPH | Total AromaticEPH | 6.62 | J | | 4.77 | 7.96 | mg/kg | |
| Total EPH | Total EPH | 10.5 | J | | 9.44 | 15.9 | mg/kg | |

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control 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

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Weston Solutions, Inc. | Date Collected: | 02/24/25 |
| Project: | RFP 905 | Date Received: | 02/24/25 |
| Client Sample ID: | P001-CLAY-CF01-02 | SDG No.: | Q1421 |
| Lab Sample ID: | Q1421-07 | Matrix: | Solid |
| Analytical Method: | NJEPH | % Solid: | 75.2 |
| Sample Wt/Vol: | 30.06 Units: g | Final Vol: | 2000 uL |
| Soil Aliquot Vol: | uL | Test: | EPH |
| Prep Method : | | | |

| File ID : | Dilution: | Prep Date : | Date Analyzed : | Prep Batch ID |
|---|---|---|---|---|
| FC068329.D | 1 | 02/27/25 | 02/28/25 | PB166923 |

| CAS Number | Parameter | | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | |
| Aliphatic C9-C12 | Aliphatic C9-C12 | | 0.50 | U | 0.50 | 1.33 | mg/kg |
| Aliphatic C12-C16 | Aliphatic C12-C16 | | 0.72 | J | 0.32 | 0.89 | mg/kg |
| Aliphatic C16-C21 | Aliphatic C16-C21 | | 0.60 | J | 0.40 | 1.33 | mg/kg |
| Aliphatic C21-C28 | Aliphatic C21-C28 | | 1.06 | U | 1.06 | 1.77 | mg/kg |
| Aliphatic C28-C40 | Aliphatic C28-C40 | | 2.54 | J | 2.39 | 2.65 | mg/kg |
| **SURROGATES** | | | | | | | |
| 3383-33-2 | 1-chlorooctadecane (SURR) | | 48.7 | | 40 - 140 | 97% | SPK: 50 |
| 84-15-1 | ortho-Terphenyl (SURR) | | 0.00 | | 40 - 140 | 0% | SPK: 50 |

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

# Quantitation Report For Aliphatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | Q1421-07 | Acq On: | 28 Feb 2025 15:16 |
| Client Sample ID: | P001-CLAY-CF01-02 | Operator: | YP/AJ |
| Data file: | FC068329.D | Misc: | |
| Instrument: | FID_C | ALS Vial: | 18 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aliphatic C9-C12 | 3.104 | 6.369 | 635441 | 4.506 | 300 | ug/ml |
| Aliphatic C12-C16 | 6.370 | 9.754 | 1118333 | 8.184 | 200 | ug/ml |
| Aliphatic C16-C21 | 9.755 | 13.107 | 889893 | 6.761 | 300 | ug/ml |
| Aliphatic C21-C28 | 13.108 | 16.761 | 838873 | 6.837 | 400 | ug/ml |
| Aliphatic C28-C40 | 16.762 | 21.565 | 2958175 | 28.763 | 600 | ug/ml |
| Aliphatic EPH | 3.104 | 21.565 | 6440715 | 55.05 | | ug/ml |
| ortho-Terphenyl (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |
| 1-chlorooctadecane (SURR) | 12.840 | 12.840 | 5479293 | 48.72 | | ug/ml |
| Aliphatic C9-C28 | 3.104 | 16.761 | 3482540 | 26.288 | 1200 | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022825AL\
Data File : FC068329.D
Signal(s) : FID1A.ch
Acq On : 28 Feb 2025 15:16
Operator : YP/AJ
Sample : Q1421-07
Misc :
ALS Vial : 18 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
P001-CLAY-CF01-02

Integration File: autoint1.e
Quant Time: Mar 05 05:24:06 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

| Compound | R.T. | Response | Conc Units |
|---|---|---|---|
| System Monitoring Compounds | | | |
| 12) S 1-chlorooctadecane (S... | 12.840 | 5479293 | 48.716 ug/ml |
| Spiked Amount 50.000 | | Recovery = 97.43% | |
| Target Compounds | | | |

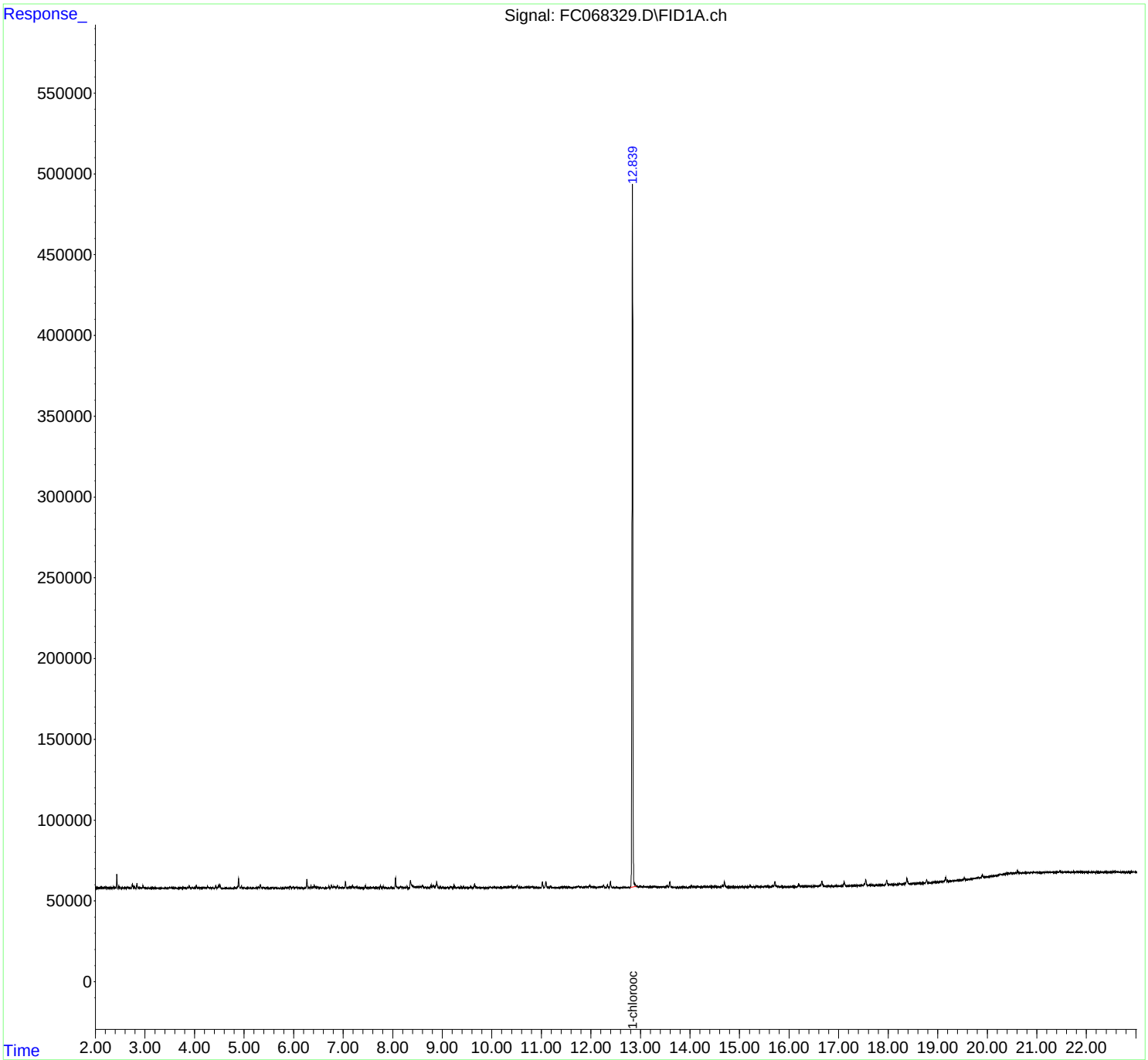
(f)=RT Delta > 1/2 Window (m)=manual int.

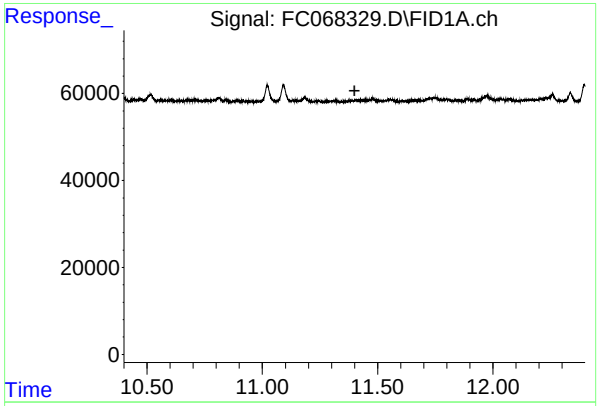
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022825AL\
Data File : FC068329.D
Signal(s) : FID1A.ch
Acq On : 28 Feb 2025 15:16
Operator : YP/AJ
Sample : Q1421-07
Misc :
ALS Vial : 18 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
P001-CLAY-CF01-02

Integration File: autoint1.e
Quant Time: Mar 05 05:24:06 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

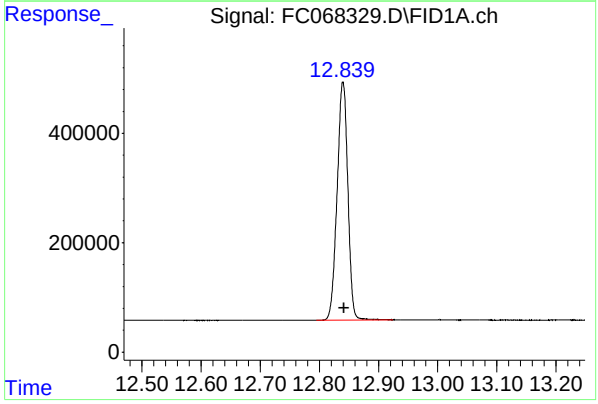





#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.400 min
Response: 0
Conc: N.D.

**Instrument :**
FID_C
**ClientSampleId :**
P001-CLAY-CF01-02




#12 1-chlorooctadecane (SURR)

R.T.: 12.840 min
Delta R.T.: -0.002 min
Response: 5479293
Conc: 48.72 ug/ml

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022825AL\
Data File : FC068329.D
Signal(s) : FID1A.ch
Acq On : 28 Feb 2025 15:16
Sample : Q1421-07
Misc :
ALS Vial : 18 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Title : GC Extractables

Signal : FID1A.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 2.359 | 2.304 | 2.411 | BV | 637 | 7364 | 0.13% | 0.059% |
| 2 | 2.432 | 2.411 | 2.461 | VV | 8589 | 66438 | 1.20% | 0.532% |
| 3 | 2.472 | 2.461 | 2.545 | VV | 942 | 10980 | 0.20% | 0.088% |
| 4 | 2.558 | 2.545 | 2.577 | PV | 169 | 1605 | 0.03% | 0.013% |
| 5 | 2.593 | 2.577 | 2.638 | VV | 381 | 4416 | 0.08% | 0.035% |
| 6 | 2.655 | 2.638 | 2.720 | VV | 682 | 11433 | 0.21% | 0.091% |
| 7 | 2.743 | 2.720 | 2.774 | VV | 2353 | 34779 | 0.63% | 0.278% |
| 8 | 2.789 | 2.774 | 2.814 | VV | 896 | 10257 | 0.18% | 0.082% |
| 9 | 2.839 | 2.814 | 2.904 | VV | 3057 | 33889 | 0.61% | 0.271% |
| 10 | 2.916 | 2.904 | 2.934 | VV | 290 | 3616 | 0.07% | 0.029% |
| 11 | 2.961 | 2.934 | 3.017 | VV | 1714 | 22153 | 0.40% | 0.177% |
| 12 | 3.027 | 3.017 | 3.155 | VV | 235 | 10225 | 0.18% | 0.082% |
| 13 | 3.162 | 3.155 | 3.191 | VV | 116 | 1923 | 0.03% | 0.015% |
| 14 | 3.207 | 3.191 | 3.243 | PV | 453 | 5387 | 0.10% | 0.043% |
| 15 | 3.305 | 3.243 | 3.332 | VV | 168 | 5224 | 0.09% | 0.042% |
| 16 | 3.360 | 3.332 | 3.376 | VV | 287 | 4295 | 0.08% | 0.034% |
| 17 | 3.384 | 3.376 | 3.393 | VV | 168 | 1289 | 0.02% | 0.010% |
| 18 | 3.410 | 3.393 | 3.423 | VV | 200 | 2294 | 0.04% | 0.018% |
| 19 | 3.438 | 3.423 | 3.457 | VV | 153 | 1887 | 0.03% | 0.015% |
| 20 | 3.499 | 3.457 | 3.514 | VV | 816 | 10870 | 0.20% | 0.087% |
| 21 | 3.524 | 3.514 | 3.558 | VV | 445 | 5736 | 0.10% | 0.046% |
| 22 | 3.574 | 3.558 | 3.608 | VV | 284 | 5218 | 0.09% | 0.042% |
| 23 | 3.611 | 3.608 | 3.648 | VV | 187 | 2724 | 0.05% | 0.022% |
| 24 | 3.660 | 3.648 | 3.672 | VV | 114 | 1336 | 0.02% | 0.011% |
| 25 | 3.702 | 3.672 | 3.734 | VV | 251 | 6045 | 0.11% | 0.048% |
| 26 | 3.770 | 3.734 | 3.818 | VV | 747 | 12409 | 0.22% | 0.099% |
| 27 | 3.866 | 3.818 | 3.877 | VV | 631 | 9540 | 0.17% | 0.076% |
| 28 | 3.894 | 3.877 | 3.941 | VV | 1489 | 19032 | 0.34% | 0.152% |
| 29 | 3.956 | 3.941 | 3.994 | VV | 281 | 5536 | 0.10% | 0.044% |
| 30 | 4.039 | 3.994 | 4.124 | VV | 1378 | 28402 | 0.51% | 0.227% |
| 31 | 4.190 | 4.124 | 4.239 | VV | 280 | 12166 | 0.22% | 0.097% |
| 32 | 4.263 | 4.239 | 4.291 | VV | 1151 | 16626 | 0.30% | 0.133% |
| 33 | 4.303 | 4.291 | 4.338 | VV | 374 | 6836 | 0.12% | 0.055% |
| 34 | 4.371 | 4.338 | 4.401 | VV | 547 | 11385 | 0.21% | 0.091% |
| 35 | 4.428 | 4.401 | 4.448 | VV | 1845 | 21912 | 0.39% | 0.175% |
| 36 | 4.483 | 4.448 | 4.497 | VV | 1715 | 21994 | 0.40% | 0.176% |

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|---|---|---|---|---|---|---|---|---|
| 37 | 4.513 | 4.497 | 4.591 | VV | 2457 | 28839 | 0.52% | 0.231% |
| 38 | 4.629 | 4.591 | 4.654 | VV | 290 | 5565 | 0.10% | 0.045% |
| 39 | 4.660 | 4.654 | 4.687 | VV | 128 | 1639 | 0.03% | 0.013% |
| 40 | 4.701 | 4.687 | 4.719 | VV | 188 | 2230 | 0.04% | 0.018% |
| 41 | 4.724 | 4.719 | 4.752 | VV | 133 | 1297 | 0.02% | 0.010% |
| 42 | 4.762 | 4.752 | 4.771 | PV | 66 | 330 | 0.01% | 0.003% |
| 43 | 4.811 | 4.771 | 4.838 | VV | 470 | 6357 | 0.11% | 0.051% |
| 44 | 4.890 | 4.838 | 4.921 | VV | 6188 | 78569 | 1.42% | 0.629% |
| 45 | 4.946 | 4.921 | 4.982 | VV | 1353 | 16520 | 0.30% | 0.132% |
| 46 | 5.003 | 4.982 | 5.025 | VV | 231 | 3547 | 0.06% | 0.028% |
| 47 | 5.081 | 5.025 | 5.110 | VV | 352 | 6994 | 0.13% | 0.056% |
| 48 | 5.123 | 5.110 | 5.145 | VV | 198 | 3305 | 0.06% | 0.026% |
| 49 | 5.183 | 5.145 | 5.240 | VV | 198 | 7705 | 0.14% | 0.062% |
| 50 | 5.254 | 5.240 | 5.274 | VV | 325 | 4283 | 0.08% | 0.034% |
| 51 | 5.291 | 5.274 | 5.311 | VV | 810 | 9647 | 0.17% | 0.077% |
| 52 | 5.332 | 5.311 | 5.363 | VV | 2283 | 26877 | 0.48% | 0.215% |
| 53 | 5.388 | 5.363 | 5.415 | VV | 636 | 8315 | 0.15% | 0.067% |
| 54 | 5.425 | 5.415 | 5.434 | VV | 169 | 1518 | 0.03% | 0.012% |
| 55 | 5.469 | 5.434 | 5.516 | VV | 391 | 10209 | 0.18% | 0.082% |
| 56 | 5.541 | 5.516 | 5.553 | VV | 183 | 2503 | 0.05% | 0.020% |
| 57 | 5.583 | 5.553 | 5.606 | VV | 383 | 7132 | 0.13% | 0.057% |
| 58 | 5.623 | 5.606 | 5.678 | VV | 244 | 7077 | 0.13% | 0.057% |
| 59 | 5.696 | 5.678 | 5.729 | VV | 204 | 2870 | 0.05% | 0.023% |
| 60 | 5.745 | 5.729 | 5.773 | PV | 219 | 3387 | 0.06% | 0.027% |
| 61 | 5.793 | 5.773 | 5.804 | VV | 287 | 2904 | 0.05% | 0.023% |
| 62 | 5.847 | 5.804 | 5.870 | VV | 588 | 13068 | 0.24% | 0.105% |
| 63 | 5.886 | 5.870 | 5.911 | VV | 668 | 9629 | 0.17% | 0.077% |
| 64 | 5.929 | 5.911 | 5.968 | VV | 1261 | 17418 | 0.31% | 0.139% |
| 65 | 5.990 | 5.968 | 6.024 | VV | 774 | 11478 | 0.21% | 0.092% |
| 66 | 6.061 | 6.024 | 6.088 | VV | 548 | 12612 | 0.23% | 0.101% |
| 67 | 6.108 | 6.088 | 6.125 | VV | 250 | 3496 | 0.06% | 0.028% |
| 68 | 6.157 | 6.125 | 6.169 | VV | 232 | 4334 | 0.08% | 0.035% |
| 69 | 6.174 | 6.169 | 6.223 | VV | 186 | 4178 | 0.08% | 0.033% |
| 70 | 6.269 | 6.223 | 6.332 | VV | 5682 | 75101 | 1.35% | 0.601% |
| 71 | 6.351 | 6.332 | 6.371 | VV | 1249 | 14442 | 0.26% | 0.116% |
| 72 | 6.386 | 6.371 | 6.399 | VV | 623 | 7973 | 0.14% | 0.064% |
| 73 | 6.417 | 6.399 | 6.437 | VV | 1915 | 23178 | 0.42% | 0.185% |
| 74 | 6.449 | 6.437 | 6.470 | VV | 752 | 9168 | 0.17% | 0.073% |
| 75 | 6.489 | 6.470 | 6.529 | VV | 1055 | 13956 | 0.25% | 0.112% |
| 76 | 6.544 | 6.529 | 6.565 | VV | 219 | 3766 | 0.07% | 0.030% |
| 77 | 6.597 | 6.565 | 6.611 | VV | 241 | 4578 | 0.08% | 0.037% |
| 78 | 6.634 | 6.611 | 6.647 | VV | 269 | 3508 | 0.06% | 0.028% |
| 79 | 6.662 | 6.647 | 6.684 | VV | 217 | 3545 | 0.06% | 0.028% |
| 80 | 6.709 | 6.684 | 6.737 | VV | 1023 | 13385 | 0.24% | 0.107% |
| 81 | 6.761 | 6.737 | 6.795 | VV | 1395 | 25745 | 0.46% | 0.206% |
| 82 | 6.811 | 6.795 | 6.853 | VV | 1054 | 24455 | 0.44% | 0.196% |
| 83 | 6.887 | 6.853 | 6.912 | VV | 1822 | 27965 | 0.50% | 0.224% |
| 84 | 6.926 | 6.912 | 6.942 | VV | 310 | 3839 | 0.07% | 0.031% |
| 85 | 6.990 | 6.942 | 7.018 | VV | 435 | 10697 | 0.19% | 0.086% |
| 86 | 7.047 | 7.018 | 7.078 | VV | 4133 | 46627 | 0.84% | 0.373% |
| 87 | 7.106 | 7.078 | 7.139 | VV | 597 | 14107 | 0.25% | 0.113% |
| 88 | 7.155 | 7.139 | 7.167 | VV | 825 | 9173 | 0.17% | 0.073% |
| 89 | 7.189 | 7.167 | 7.214 | VV | 1910 | 26432 | 0.48% | 0.212% |

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|---|---|---|---|---|---|---|---|---|
| 90 | 7.224 | 7.214 | 7.233 | VV | 411 | 4261 | 0.08% | 0.034% |
| 91 | 7.249 | 7.233 | 7.265 | VV | 723 | 10328 | 0.19% | 0.083% |
| 92 | 7.280 | 7.265 | 7.314 | VV | 911 | 12402 | 0.22% | 0.099% |
| 93 | 7.355 | 7.314 | 7.384 | VV | 251 | 7251 | 0.13% | 0.058% |
| 94 | 7.448 | 7.384 | 7.480 | VV | 1705 | 24092 | 0.43% | 0.193% |
| 95 | 7.530 | 7.480 | 7.564 | VV | 356 | 10536 | 0.19% | 0.084% |
| 96 | 7.612 | 7.564 | 7.629 | VV | 325 | 8923 | 0.16% | 0.071% |
| 97 | 7.644 | 7.629 | 7.653 | VV | 351 | 3456 | 0.06% | 0.028% |
| 98 | 7.668 | 7.653 | 7.692 | VV | 324 | 5176 | 0.09% | 0.041% |
| 99 | 7.708 | 7.692 | 7.731 | VV | 388 | 5249 | 0.09% | 0.042% |
| 100 | 7.754 | 7.731 | 7.786 | VV | 1260 | 16720 | 0.30% | 0.134% |
| 101 | 7.809 | 7.786 | 7.831 | VV | 1211 | 14680 | 0.26% | 0.117% |
| 102 | 7.847 | 7.831 | 7.868 | VV | 446 | 6476 | 0.12% | 0.052% |
| 103 | 7.877 | 7.868 | 7.896 | VV | 440 | 4299 | 0.08% | 0.034% |
| 104 | 7.912 | 7.896 | 7.938 | VV | 168 | 3108 | 0.06% | 0.025% |
| 105 | 7.964 | 7.938 | 8.026 | VV | 644 | 11200 | 0.20% | 0.090% |
| 106 | 8.057 | 8.026 | 8.125 | VV | 6424 | 82368 | 1.48% | 0.659% |
| 107 | 8.165 | 8.125 | 8.188 | VV | 779 | 18799 | 0.34% | 0.150% |
| 108 | 8.204 | 8.188 | 8.227 | VV | 734 | 9451 | 0.17% | 0.076% |
| 109 | 8.250 | 8.227 | 8.269 | VV | 608 | 7847 | 0.14% | 0.063% |
| 110 | 8.289 | 8.269 | 8.317 | VV | 766 | 9315 | 0.17% | 0.075% |
| 111 | 8.359 | 8.317 | 8.444 | PV | 4736 | 113074 | 2.04% | 0.905% |
| 112 | 8.470 | 8.444 | 8.488 | VV | 848 | 18554 | 0.33% | 0.148% |
| 113 | 8.514 | 8.488 | 8.529 | VV | 1041 | 19683 | 0.35% | 0.158% |
| 114 | 8.544 | 8.529 | 8.558 | VV | 892 | 13574 | 0.24% | 0.109% |
| 115 | 8.566 | 8.558 | 8.576 | VV | 800 | 8013 | 0.14% | 0.064% |
| 116 | 8.594 | 8.576 | 8.635 | VV | 1555 | 34048 | 0.61% | 0.272% |
| 117 | 8.655 | 8.635 | 8.691 | VV | 842 | 13033 | 0.23% | 0.104% |
| 118 | 8.708 | 8.691 | 8.731 | VV | 598 | 8943 | 0.16% | 0.072% |
| 119 | 8.745 | 8.731 | 8.753 | VV | 427 | 4293 | 0.08% | 0.034% |
| 120 | 8.777 | 8.753 | 8.794 | VV | 2171 | 27743 | 0.50% | 0.222% |
| 121 | 8.812 | 8.794 | 8.861 | VV | 1377 | 37273 | 0.67% | 0.298% |
| 122 | 8.890 | 8.861 | 8.941 | VV | 3282 | 63654 | 1.15% | 0.509% |
| 123 | 8.963 | 8.941 | 8.986 | VV | 874 | 13135 | 0.24% | 0.105% |
| 124 | 9.012 | 8.986 | 9.038 | VV | 647 | 10225 | 0.18% | 0.082% |
| 125 | 9.092 | 9.038 | 9.141 | VV | 525 | 17376 | 0.31% | 0.139% |
| 126 | 9.177 | 9.141 | 9.214 | VV | 827 | 19680 | 0.35% | 0.158% |
| 127 | 9.240 | 9.214 | 9.279 | VV | 1560 | 25523 | 0.46% | 0.204% |
| 128 | 9.296 | 9.279 | 9.304 | VV | 388 | 4361 | 0.08% | 0.035% |
| 129 | 9.315 | 9.304 | 9.328 | VV | 369 | 4510 | 0.08% | 0.036% |
| 130 | 9.336 | 9.328 | 9.357 | VV | 316 | 3461 | 0.06% | 0.028% |
| 131 | 9.381 | 9.357 | 9.409 | VV | 664 | 11666 | 0.21% | 0.093% |
| 132 | 9.433 | 9.409 | 9.465 | VV | 819 | 13199 | 0.24% | 0.106% |
| 133 | 9.485 | 9.465 | 9.514 | VV | 287 | 5175 | 0.09% | 0.041% |
| 134 | 9.521 | 9.514 | 9.545 | VV | 261 | 2970 | 0.05% | 0.024% |
| 135 | 9.573 | 9.545 | 9.626 | VV | 949 | 18114 | 0.33% | 0.145% |
| 136 | 9.653 | 9.626 | 9.701 | VV | 2658 | 40252 | 0.72% | 0.322% |
| 137 | 9.727 | 9.701 | 9.738 | VV | 490 | 8494 | 0.15% | 0.068% |
| 138 | 9.748 | 9.738 | 9.788 | VV | 464 | 10273 | 0.19% | 0.082% |
| 139 | 9.803 | 9.788 | 9.845 | VV | 323 | 6459 | 0.12% | 0.052% |
| 140 | 9.863 | 9.845 | 9.874 | PV | 126 | 1689 | 0.03% | 0.014% |
| 141 | 9.932 | 9.874 | 9.944 | VV | 360 | 7973 | 0.14% | 0.064% |

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|---|---|---|---|---|---|---|---|---|
| 142 | 9.970 | 9.944 | 9.988 | VV | 687 | 10633 | 0.19% | 0.085% |
| 143 | 9.996 | 9.988 | 10.006 | VV | 318 | 2942 | 0.05% | 0.024% |
| 144 | 10.043 | 10.006 | 10.061 | VV | 626 | 15741 | 0.28% | 0.126% |
| 145 | 10.079 | 10.061 | 10.108 | VV | 664 | 12735 | 0.23% | 0.102% |
| 146 | 10.128 | 10.108 | 10.148 | VV | 520 | 9919 | 0.18% | 0.079% |
| 147 | 10.158 | 10.148 | 10.184 | VV | 465 | 6836 | 0.12% | 0.055% |
| 148 | 10.200 | 10.184 | 10.221 | VV | 266 | 5631 | 0.10% | 0.045% |
| 149 | 10.250 | 10.221 | 10.266 | VV | 624 | 12337 | 0.22% | 0.099% |
| 150 | 10.282 | 10.266 | 10.303 | VV | 614 | 11019 | 0.20% | 0.088% |
| 151 | 10.328 | 10.303 | 10.354 | VV | 757 | 17362 | 0.31% | 0.139% |
| 152 | 10.390 | 10.354 | 10.424 | VV | 1061 | 27594 | 0.50% | 0.221% |
| 153 | 10.445 | 10.424 | 10.456 | VV | 703 | 9946 | 0.18% | 0.080% |
| 154 | 10.474 | 10.456 | 10.491 | VV | 730 | 12481 | 0.22% | 0.100% |
| 155 | 10.515 | 10.491 | 10.551 | VV | 1841 | 34485 | 0.62% | 0.276% |
| 156 | 10.559 | 10.551 | 10.582 | VV | 513 | 7862 | 0.14% | 0.063% |
| 157 | 10.606 | 10.582 | 10.624 | VV | 541 | 10000 | 0.18% | 0.080% |
| 158 | 10.643 | 10.624 | 10.660 | VV | 354 | 6823 | 0.12% | 0.055% |
| 159 | 10.673 | 10.660 | 10.690 | VV | 525 | 7332 | 0.13% | 0.059% |
| 160 | 10.710 | 10.690 | 10.741 | VV | 585 | 12534 | 0.23% | 0.100% |
| 161 | 10.811 | 10.741 | 10.831 | VV | 915 | 27369 | 0.49% | 0.219% |
| 162 | 10.842 | 10.831 | 10.864 | VV | 471 | 6216 | 0.11% | 0.050% |
| 163 | 10.892 | 10.864 | 10.968 | VV | 425 | 14401 | 0.26% | 0.115% |
| 164 | 10.978 | 10.968 | 10.991 | VV | 170 | 2016 | 0.04% | 0.016% |
| 165 | 11.022 | 10.991 | 11.058 | VV | 3854 | 55261 | 1.00% | 0.442% |
| 166 | 11.092 | 11.058 | 11.125 | VV | 3906 | 58119 | 1.05% | 0.465% |
| 167 | 11.143 | 11.125 | 11.156 | VV | 397 | 6459 | 0.12% | 0.052% |
| 168 | 11.184 | 11.156 | 11.221 | VV | 1065 | 18413 | 0.33% | 0.147% |
| 169 | 11.242 | 11.221 | 11.267 | VV | 234 | 4289 | 0.08% | 0.034% |
| 170 | 11.310 | 11.267 | 11.348 | VV | 248 | 7669 | 0.14% | 0.061% |
| 171 | 11.445 | 11.348 | 11.458 | VV | 507 | 20913 | 0.38% | 0.167% |
| 172 | 11.478 | 11.458 | 11.518 | VV | 774 | 15816 | 0.28% | 0.127% |
| 173 | 11.552 | 11.518 | 11.598 | VV | 603 | 16546 | 0.30% | 0.132% |
| 174 | 11.608 | 11.598 | 11.625 | VV | 269 | 3261 | 0.06% | 0.026% |
| 175 | 11.682 | 11.625 | 11.694 | VV | 424 | 12134 | 0.22% | 0.097% |
| 176 | 11.725 | 11.694 | 11.733 | VV | 829 | 13853 | 0.25% | 0.111% |
| 177 | 11.751 | 11.733 | 11.777 | VV | 956 | 19368 | 0.35% | 0.155% |
| 178 | 11.797 | 11.777 | 11.828 | VV | 576 | 13613 | 0.25% | 0.109% |
| 179 | 11.848 | 11.828 | 11.870 | VV | 436 | 8524 | 0.15% | 0.068% |
| 180 | 11.890 | 11.870 | 11.938 | VV | 598 | 18724 | 0.34% | 0.150% |
| 181 | 11.974 | 11.938 | 12.010 | VV | 1419 | 36203 | 0.65% | 0.290% |
| 182 | 12.030 | 12.010 | 12.058 | VV | 626 | 14862 | 0.27% | 0.119% |
| 183 | 12.070 | 12.058 | 12.111 | VV | 650 | 12112 | 0.22% | 0.097% |
| 184 | 12.162 | 12.111 | 12.181 | VV | 519 | 15739 | 0.28% | 0.126% |
| 185 | 12.206 | 12.181 | 12.218 | VV | 679 | 11596 | 0.21% | 0.093% |
| 186 | 12.258 | 12.218 | 12.307 | VV | 1626 | 37611 | 0.68% | 0.301% |
| 187 | 12.336 | 12.307 | 12.371 | VV | 2030 | 28231 | 0.51% | 0.226% |
| 188 | 12.396 | 12.371 | 12.478 | VV | 3881 | 58013 | 1.04% | 0.464% |
| 189 | 12.511 | 12.478 | 12.598 | VV | 271 | 11008 | 0.20% | 0.088% |
| 190 | 12.607 | 12.598 | 12.624 | VV | 79 | 468 | 0.01% | 0.004% |
| 191 | 12.674 | 12.624 | 12.704 | PV | 310 | 10423 | 0.19% | 0.083% |
| 192 | 12.720 | 12.704 | 12.741 | VV | 259 | 3903 | 0.07% | 0.031% |
| 193 | 12.768 | 12.741 | 12.795 | VV | 344 | 8195 | 0.15% | 0.066% |
| 194 | 12.840 | 12.795 | 12.981 | VV | 436016 | 5552221 | 100.00% | 44.434% |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 195 | 13.003 | 12.981 | 13.038 | VV | 932 | 25229 | 0.45% | 0.202% |
| 196 | 13.067 | 13.038 | 13.101 | VV | 714 | 23003 | 0.41% | 0.184% |
| 197 | 13.114 | 13.101 | 13.178 | VV | 537 | 20264 | 0.36% | 0.162% |
| 198 | 13.210 | 13.178 | 13.240 | VV | 638 | 18838 | 0.34% | 0.151% |
| 199 | 13.292 | 13.240 | 13.324 | VV | 855 | 29827 | 0.54% | 0.239% |
| 200 | 13.339 | 13.324 | 13.367 | VV | 433 | 9363 | 0.17% | 0.075% |
| 201 | 13.391 | 13.367 | 13.424 | VV | 419 | 12113 | 0.22% | 0.097% |
| 202 | 13.443 | 13.424 | 13.454 | VV | 597 | 8242 | 0.15% | 0.066% |
| 203 | 13.458 | 13.454 | 13.482 | VV | 563 | 7159 | 0.13% | 0.057% |
| 204 | 13.540 | 13.482 | 13.565 | VV | 1460 | 32931 | 0.59% | 0.264% |
| 205 | 13.593 | 13.565 | 13.656 | VV | 3411 | 56459 | 1.02% | 0.452% |
| 206 | 13.670 | 13.656 | 13.692 | VV | 365 | 4437 | 0.08% | 0.036% |
| 207 | 13.700 | 13.692 | 13.722 | VV | 196 | 2624 | 0.05% | 0.021% |
| 208 | 13.736 | 13.722 | 13.771 | VV | 185 | 2746 | 0.05% | 0.022% |
| 209 | 13.810 | 13.771 | 13.820 | PV | 201 | 4027 | 0.07% | 0.032% |
| 210 | 13.838 | 13.820 | 13.878 | VV | 266 | 6936 | 0.12% | 0.056% |
| 211 | 13.890 | 13.878 | 13.908 | VV | 248 | 3537 | 0.06% | 0.028% |
| 212 | 13.920 | 13.908 | 13.961 | VV | 215 | 5836 | 0.11% | 0.047% |
| 213 | 14.030 | 13.961 | 14.071 | VV | 1143 | 28954 | 0.52% | 0.232% |
| 214 | 14.077 | 14.071 | 14.104 | VV | 450 | 6576 | 0.12% | 0.053% |
| 215 | 14.156 | 14.104 | 14.198 | VV | 706 | 21830 | 0.39% | 0.175% |
| 216 | 14.209 | 14.198 | 14.234 | VV | 318 | 6340 | 0.11% | 0.051% |
| 217 | 14.284 | 14.234 | 14.331 | VV | 499 | 23956 | 0.43% | 0.192% |
| 218 | 14.337 | 14.331 | 14.377 | VV | 436 | 10382 | 0.19% | 0.083% |
| 219 | 14.402 | 14.377 | 14.428 | VV | 575 | 13040 | 0.23% | 0.104% |
| 220 | 14.460 | 14.428 | 14.486 | VV | 592 | 15975 | 0.29% | 0.128% |
| 221 | 14.500 | 14.486 | 14.522 | VV | 545 | 9296 | 0.17% | 0.074% |
| 222 | 14.537 | 14.522 | 14.555 | VV | 328 | 5392 | 0.10% | 0.043% |
| 223 | 14.560 | 14.555 | 14.571 | VV | 308 | 2373 | 0.04% | 0.019% |
| 224 | 14.596 | 14.571 | 14.613 | VV | 334 | 6938 | 0.12% | 0.056% |
| 225 | 14.651 | 14.613 | 14.670 | VV | 1101 | 21384 | 0.39% | 0.171% |
| 226 | 14.694 | 14.670 | 14.808 | VV | 3570 | 65621 | 1.18% | 0.525% |
| 227 | 14.817 | 14.808 | 14.832 | VV | 153 | 1038 | 0.02% | 0.008% |
| 228 | 14.867 | 14.832 | 14.984 | VV | 258 | 13725 | 0.25% | 0.110% |
| 229 | 15.026 | 14.984 | 15.051 | VV | 178 | 4217 | 0.08% | 0.034% |
| 230 | 15.059 | 15.051 | 15.073 | VV | 117 | 1259 | 0.02% | 0.010% |
| 231 | 15.122 | 15.073 | 15.148 | VV | 241 | 7144 | 0.13% | 0.057% |
| 232 | 15.164 | 15.148 | 15.188 | VV | 228 | 4953 | 0.09% | 0.040% |
| 233 | 15.214 | 15.188 | 15.252 | VV | 1278 | 22242 | 0.40% | 0.178% |
| 234 | 15.261 | 15.252 | 15.318 | VV | 240 | 7116 | 0.13% | 0.057% |
| 235 | 15.329 | 15.318 | 15.334 | VV | 281 | 1995 | 0.04% | 0.016% |
| 236 | 15.401 | 15.334 | 15.468 | VV | 369 | 20317 | 0.37% | 0.163% |
| 237 | 15.565 | 15.468 | 15.628 | VV | 460 | 28247 | 0.51% | 0.226% |
| 238 | 15.675 | 15.628 | 15.691 | VV | 895 | 15765 | 0.28% | 0.126% |
| 239 | 15.713 | 15.691 | 15.832 | VV | 3416 | 63566 | 1.14% | 0.509% |
| 240 | 15.849 | 15.832 | 15.864 | VV | 93 | 1627 | 0.03% | 0.013% |
| 241 | 15.879 | 15.864 | 15.911 | VV | 151 | 3502 | 0.06% | 0.028% |
| 242 | 15.921 | 15.911 | 15.940 | VV | 120 | 1466 | 0.03% | 0.012% |
| 243 | 15.959 | 15.940 | 15.974 | VV | 131 | 1431 | 0.03% | 0.011% |
| 244 | 15.982 | 15.974 | 15.993 | PV | 109 | 854 | 0.02% | 0.007% |
| 245 | 16.024 | 15.993 | 16.041 | VV | 191 | 3090 | 0.06% | 0.025% |
| 246 | 16.051 | 16.041 | 16.060 | VV | 147 | 944 | 0.02% | 0.008% |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 247 | 16.080 | 16.060 | 16.141 | VV | 146 | 4055 | 0.07% | 0.032% |
| 248 | 16.196 | 16.141 | 16.256 | VV | 1754 | 33766 | 0.61% | 0.270% |
| 249 | 16.274 | 16.256 | 16.304 | VV | 248 | 4773 | 0.09% | 0.038% |
| 250 | 16.399 | 16.304 | 16.419 | VV | 303 | 14788 | 0.27% | 0.118% |
| 251 | 16.437 | 16.419 | 16.461 | VV | 257 | 4981 | 0.09% | 0.040% |
| 252 | 16.548 | 16.461 | 16.565 | VV | 414 | 16228 | 0.29% | 0.130% |
| 253 | 16.585 | 16.565 | 16.598 | VV | 389 | 6195 | 0.11% | 0.050% |
| 254 | 16.661 | 16.598 | 16.801 | VV | 3529 | 86193 | 1.55% | 0.690% |
| 255 | 16.809 | 16.801 | 16.853 | VV | 176 | 3264 | 0.06% | 0.026% |
| 256 | 16.874 | 16.853 | 16.888 | VV | 110 | 1550 | 0.03% | 0.012% |
| 257 | 16.896 | 16.888 | 16.914 | VV | 144 | 592 | 0.01% | 0.005% |
| 258 | 16.951 | 16.914 | 16.979 | PV | 278 | 7518 | 0.14% | 0.060% |
| 259 | 16.999 | 16.979 | 17.034 | VV | 246 | 4889 | 0.09% | 0.039% |
| 260 | 17.044 | 17.034 | 17.051 | VV | 137 | 974 | 0.02% | 0.008% |
| 261 | 17.111 | 17.051 | 17.187 | VV | 2858 | 50570 | 0.91% | 0.405% |
| 262 | 17.205 | 17.187 | 17.244 | VV | 257 | 5134 | 0.09% | 0.041% |
| 263 | 17.298 | 17.244 | 17.328 | VV | 226 | 7058 | 0.13% | 0.056% |
| 264 | 17.335 | 17.328 | 17.368 | VV | 193 | 3777 | 0.07% | 0.030% |
| 265 | 17.390 | 17.368 | 17.417 | VV | 236 | 5216 | 0.09% | 0.042% |
| 266 | 17.547 | 17.417 | 17.601 | VV | 3717 | 77929 | 1.40% | 0.624% |
| 267 | 17.656 | 17.601 | 17.743 | VV | 422 | 17866 | 0.32% | 0.143% |
| 268 | 17.827 | 17.743 | 17.851 | PV | 326 | 7598 | 0.14% | 0.061% |
| 269 | 17.861 | 17.851 | 17.911 | VV | 237 | 3677 | 0.07% | 0.029% |
| 270 | 17.969 | 17.911 | 18.008 | PV | 3196 | 52409 | 0.94% | 0.419% |
| 271 | 18.028 | 18.008 | 18.041 | VV | 203 | 3203 | 0.06% | 0.026% |
| 272 | 18.059 | 18.041 | 18.081 | VV | 222 | 3212 | 0.06% | 0.026% |
| 273 | 18.095 | 18.081 | 18.120 | VV | 249 | 3129 | 0.06% | 0.025% |
| 274 | 18.146 | 18.120 | 18.192 | PV | 210 | 4999 | 0.09% | 0.040% |
| 275 | 18.239 | 18.192 | 18.274 | VV | 300 | 8714 | 0.16% | 0.070% |
| 276 | 18.285 | 18.274 | 18.313 | VV | 104 | 1933 | 0.03% | 0.015% |
| 277 | 18.378 | 18.313 | 18.454 | VV | 3308 | 67793 | 1.22% | 0.543% |
| 278 | 18.504 | 18.454 | 18.554 | VV | 249 | 8467 | 0.15% | 0.068% |
| 279 | 18.595 | 18.554 | 18.605 | VV | 203 | 3770 | 0.07% | 0.030% |
| 280 | 18.626 | 18.605 | 18.648 | VV | 208 | 3413 | 0.06% | 0.027% |
| 281 | 18.659 | 18.648 | 18.668 | PV | 181 | 1128 | 0.02% | 0.009% |
| 282 | 18.679 | 18.668 | 18.691 | VV | 154 | 1114 | 0.02% | 0.009% |
| 283 | 18.775 | 18.691 | 18.818 | PV | 2168 | 35837 | 0.65% | 0.287% |
| 284 | 18.827 | 18.818 | 18.835 | VV | 133 | 1248 | 0.02% | 0.010% |
| 285 | 18.912 | 18.835 | 18.927 | VV | 181 | 7328 | 0.13% | 0.059% |
| 286 | 18.958 | 18.927 | 18.990 | VV | 312 | 6916 | 0.12% | 0.055% |
| 287 | 19.027 | 18.990 | 19.051 | VV | 383 | 8872 | 0.16% | 0.071% |
| 288 | 19.088 | 19.051 | 19.104 | VV | 333 | 9396 | 0.17% | 0.075% |
| 289 | 19.161 | 19.104 | 19.231 | VV | 2770 | 64499 | 1.16% | 0.516% |
| 290 | 19.260 | 19.231 | 19.271 | VV | 336 | 7263 | 0.13% | 0.058% |
| 291 | 19.347 | 19.271 | 19.356 | VV | 428 | 16612 | 0.30% | 0.133% |
| 292 | 19.413 | 19.356 | 19.424 | VV | 557 | 19275 | 0.35% | 0.154% |
| 293 | 19.457 | 19.424 | 19.504 | VV | 567 | 23436 | 0.42% | 0.188% |
| 294 | 19.536 | 19.504 | 19.582 | VV | 1675 | 41398 | 0.75% | 0.331% |
| 295 | 19.807 | 19.582 | 19.821 | VV | 1303 | 123381 | 2.22% | 0.987% |
| 296 | 19.901 | 19.821 | 19.940 | VV | 2868 | 113951 | 2.05% | 0.912% |
| 297 | 19.983 | 19.940 | 20.011 | VV | 1577 | 63411 | 1.14% | 0.507% |
| 298 | 20.081 | 20.011 | 20.093 | VV | 1727 | 78481 | 1.41% | 0.628% |
| 299 | 20.123 | 20.093 | 20.131 | VV | 1840 | 40247 | 0.72% | 0.322% |

rteres

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 300 | 20.139 | 20.131 | 20.144 | VV | 1778 | 13247 | 0.24% | 0.106% |
| 301 | 20.174 | 20.144 | 20.185 | VV | 1965 | 46085 | 0.83% | 0.369% |
| 302 | 20.256 | 20.185 | 20.284 | VV | 2784 | 131136 | 2.36% | 1.049% |
| 303 | 20.435 | 20.284 | 20.454 | VV | 2920 | 260534 | 4.69% | 2.085% |
| 304 | 20.483 | 20.454 | 20.505 | VV | 2748 | 83523 | 1.50% | 0.668% |
| 305 | 20.528 | 20.505 | 20.545 | VV | 2768 | 65681 | 1.18% | 0.526% |
| 306 | 20.553 | 20.545 | 20.568 | VV | 2672 | 35877 | 0.65% | 0.287% |
| 307 | 20.610 | 20.568 | 20.666 | VV | 3603 | 175842 | 3.17% | 1.407% |
| 308 | 20.681 | 20.666 | 20.690 | VV | 2627 | 36005 | 0.65% | 0.288% |
| 309 | 20.786 | 20.690 | 20.848 | VV | 2614 | 241181 | 4.34% | 1.930% |
| 310 | 20.864 | 20.848 | 20.878 | VV | 2480 | 43756 | 0.79% | 0.350% |
| 311 | 20.948 | 20.878 | 20.979 | VV | 2525 | 145087 | 2.61% | 1.161% |
| 312 | 21.012 | 20.979 | 21.072 | VV | 2360 | 122291 | 2.20% | 0.979% |
| 313 | 21.080 | 21.072 | 21.094 | VV | 2108 | 27653 | 0.50% | 0.221% |
| 314 | 21.151 | 21.094 | 21.160 | VV | 2001 | 78496 | 1.41% | 0.628% |
| 315 | 21.207 | 21.160 | 21.255 | VV | 1996 | 109701 | 1.98% | 0.878% |
| 316 | 21.267 | 21.255 | 21.288 | VV | 1975 | 37328 | 0.67% | 0.299% |
| 317 | 21.311 | 21.288 | 21.335 | VV | 1815 | 49267 | 0.89% | 0.394% |
| 318 | 21.353 | 21.335 | 21.361 | VV | 1743 | 27181 | 0.49% | 0.218% |
| 319 | 21.371 | 21.361 | 21.381 | VV | 1728 | 20072 | 0.36% | 0.161% |
| 320 | 21.392 | 21.381 | 21.401 | VV | 1673 | 19605 | 0.35% | 0.157% |
| 321 | 21.466 | 21.401 | 21.512 | VV | 2073 | 118202 | 2.13% | 0.946% |
| 322 | 21.521 | 21.512 | 21.531 | VV | 1491 | 16674 | 0.30% | 0.133% |
| 323 | 21.547 | 21.531 | 21.567 | VV | 1554 | 31304 | 0.56% | 0.251% |
| 324 | 21.595 | 21.567 | 21.624 | VV | 1400 | 46458 | 0.84% | 0.372% |
| 325 | 21.638 | 21.624 | 21.687 | VV | 1336 | 46500 | 0.84% | 0.372% |
| 326 | 21.698 | 21.687 | 21.705 | VV | 1201 | 12635 | 0.23% | 0.101% |
| 327 | 21.745 | 21.705 | 21.839 | VV | 1155 | 82173 | 1.48% | 0.658% |
| 328 | 21.848 | 21.839 | 21.938 | VV | 890 | 43192 | 0.78% | 0.346% |
| 329 | 21.993 | 21.938 | 22.034 | VV | 644 | 30903 | 0.56% | 0.247% |
| 330 | 22.053 | 22.034 | 22.108 | VV | 471 | 15011 | 0.27% | 0.120% |
| 331 | 22.134 | 22.108 | 22.167 | VV | 241 | 6583 | 0.12% | 0.053% |
| 332 | 22.175 | 22.167 | 22.183 | VV | 115 | 927 | 0.02% | 0.007% |
| 333 | 22.195 | 22.183 | 22.207 | PV | 78 | 865 | 0.02% | 0.007% |

Sum of corrected areas: 12495336

Aliphatic EPH 021125.M Sat Mar 01 01:27:55 2025

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Weston Solutions, Inc. | Date Collected: | 02/24/25 |
| Project: | RFP 905 | Date Received: | 02/24/25 |
| Client Sample ID: | P001-CLAY-CF01-02 | SDG No.: | Q1421 |
| Lab Sample ID: | Q1421-07 | Matrix: | Solid |
| Analytical Method: | NJEPH | % Solid: | 75.2 |
| Sample Wt/Vol: | 30.06 Units: g | Final Vol: | 2000 uL |
| Soil Aliquot Vol: | uL | Test: | EPH |
| Prep Method : | | | |

| File ID : | Dilution: | Prep Date : | Date Analyzed : | Prep Batch ID |
|---|---|---|---|---|
| FD049137.D | 1 | 02/27/25 | 02/28/25 | PB166923 |

| CAS Number | Parameter | | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | |
| Aromatic C10-C12 | Aromatic C10-C12 | | 0.43 | J | 0.40 | 0.89 | mg/kg |
| Aromatic C12-C16 | Aromatic C12-C16 | | 0.63 | J | 0.45 | 1.33 | mg/kg |
| Aromatic C16-C21 | Aromatic C16-C21 | | 2.48 | | 1.27 | 2.21 | mg/kg |
| Aromatic C21-C36 | Aromatic C21-C36 | | 3.08 | J | 2.65 | 3.54 | mg/kg |
| **SURROGATES** | | | | | | | |
| 580-13-2 | 2-Bromonaphthalene (SURR) | | 64.4 | | 40 - 140 | 129% | SPK: 50 |
| 321-60-8 | 2-Flurobiphenyl (SURR) | | 66.4 | | 40 - 140 | 133% | SPK: 50 |
| 84-15-1 | ortho-Terphenyl (SURR) | | 51.4 | | 40 - 140 | 103% | SPK: 50 |

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

# Quantitation Report For Aromatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | Q1421-07 | Acq On: | 28 Feb 2025 15:16 |
| Client Sample ID: | P001-CLAY-CF01-02 | Operator: | YP/AJ |
| Data file: | FD049137.D | Misc: | |
| Instrument: | FID_D | ALS Vial: | 68 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aromatic C10-C12 | 4.076 | 5.794 | 778390 | 4.895 | 200 | ug/ml |
| Aromatic C12-C16 | 5.795 | 8.396 | 1143053 | 7.103 | 300 | ug/ml |
| Aromatic C16-C21 | 8.397 | 12.661 | 4292784 | 27.992 | 500 | ug/ml |
| Aromatic C21-C36 | 12.662 | 18.073 | 4978028 | 34.783 | 800 | ug/ml |
| Aromatic EPH | 4.076 | 18.073 | 11192255 | 74.773 | | ug/ml |
| ortho-Terphenyl (SURR) | 11.237 | 11.237 | 8318590 | 51.42 | | ug/ml |
| 2-Bromonaphthalene (SURR) | 7.351 | 7.351 | 9217255 | 64.41 | | ug/ml |
| 2-Flurobiphenyl (SURR) | 8.201 | 8.201 | 5835480 | 66.38 | | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022825AR\
Data File : FD049137.D
Signal(s) : FID2B.ch
Acq On : 28 Feb 2025 15:16
Operator : YP/AJ
Sample : Q1421-07
Misc :
ALS Vial : 68 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF01-02

Integration File: autoint1.e
Quant Time: Mar 01 02:19:17 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

| Compound | R.T. | Response | Conc Units |
|---|---|---|---|
| **System Monitoring Compounds** | | | |
| 4) S 2-Bromonaphthalene (S... | 7.351 | 9217255 | 64.407 ug/ml |
| Spiked Amount 50.000 | | Recovery = 128.81% | |
| 6) S 2-Flurobiphenyl (SURR) | 8.201 | 5835480 | 66.379 ug/ml |
| Spiked Amount 50.000 Range 0 - 131 | | Recovery = 132.76%# | |
| 11) S ortho-Terphenyl (SURR) | 11.237 | 8318590 | 51.421 ug/ml |
| Spiked Amount 50.000 | | Recovery = 102.84% | |
| **Target Compounds** | | | |

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

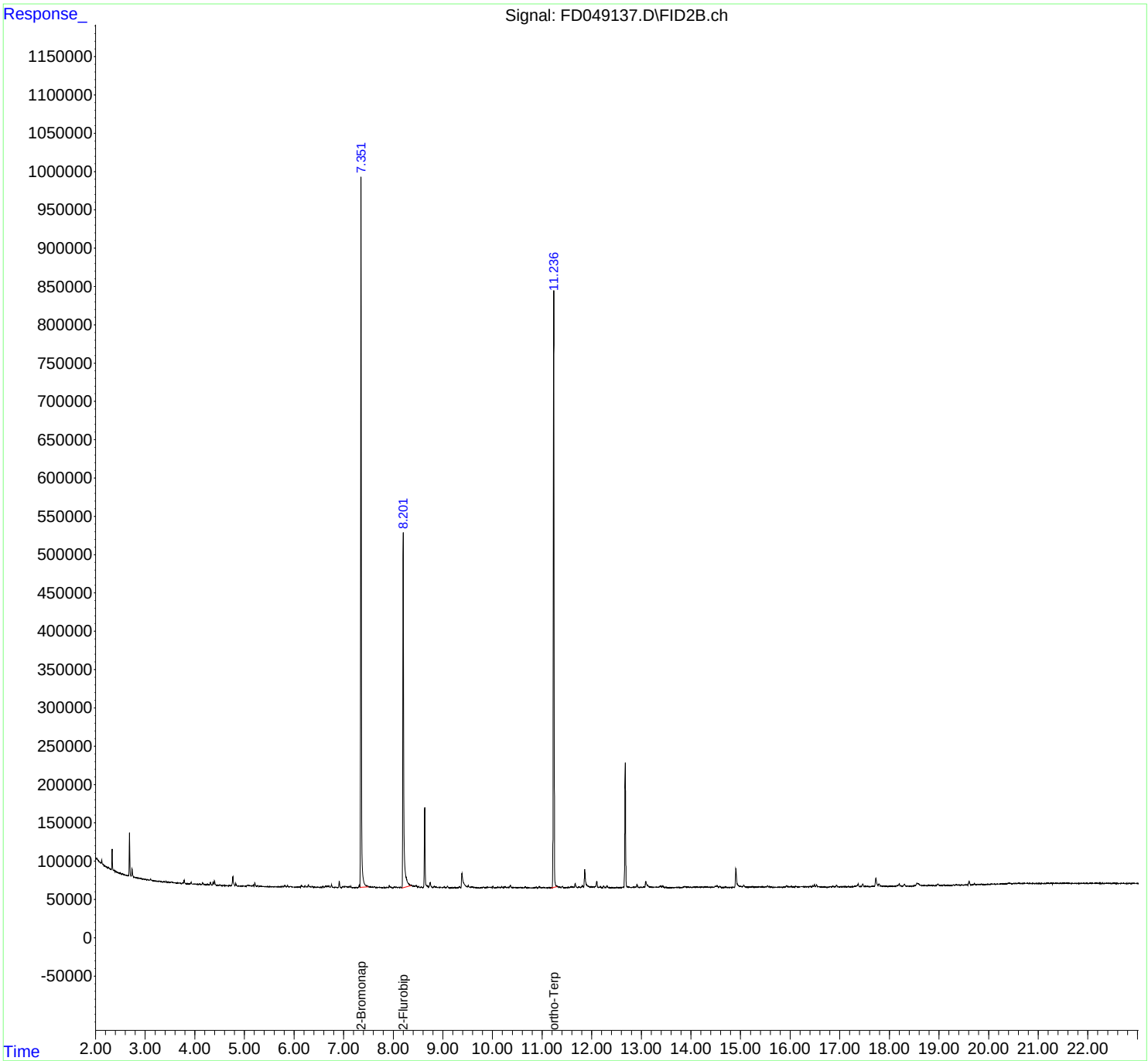
Quantitation Report (QT Reviewed)

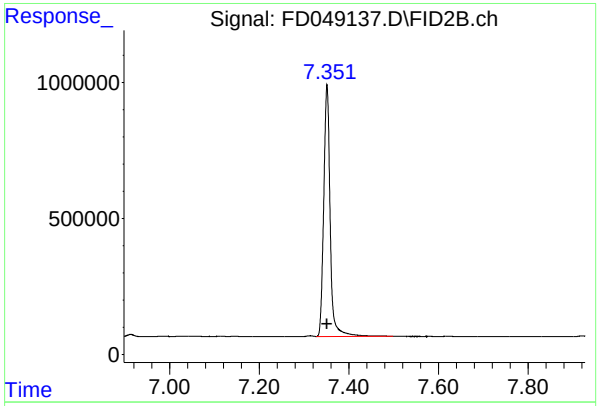
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022825AR\
Data File : FD049137.D
Signal(s) : FID2B.ch
Acq On : 28 Feb 2025 15:16
Operator : YP/AJ
Sample : Q1421-07
Misc :
ALS Vial : 68 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF01-02

Integration File: autoint1.e
Quant Time: Mar 01 02:19:17 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

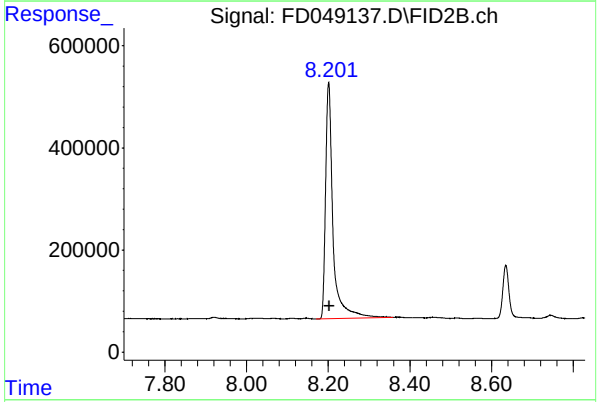





#4 2-Bromonaphthalene (SURR)

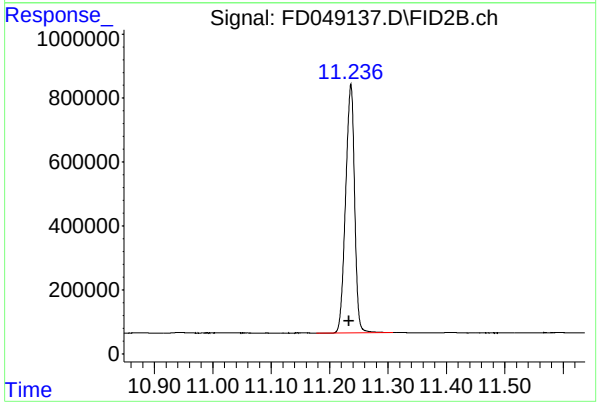
R.T.: 7.351 min
Delta R.T.: 0.000 min
Response: 9217255
Conc: 64.41 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF01-02




#6 2-Flurobiphenyl (SURR)

R.T.: 8.201 min
Delta R.T.: -0.001 min
Response: 5835480
Conc: 66.38 ug/ml




#11 ortho-Terphenyl (SURR)

R.T.: 11.237 min
Delta R.T.: 0.003 min
Response: 8318590
Conc: 51.42 ug/ml

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022825AR\
Data File : FD049137.D
Signal(s) : FID2B.ch
Acq On : 28 Feb 2025 15:16
Sample : Q1421-07
Misc :
ALS Vial : 68 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Title : GC Extractables

Signal : FID2B.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 4.061 | 4.042 | 4.099 | BV | 230 | 3842 | 0.04% | 0.011% |
| 2 | 4.103 | 4.099 | 4.127 | VV | 236 | 1932 | 0.02% | 0.006% |
| 3 | 4.135 | 4.127 | 4.141 | PV | 285 | 1120 | 0.01% | 0.003% |
| 4 | 4.158 | 4.141 | 4.227 | VV | 2568 | 36503 | 0.39% | 0.104% |
| 5 | 4.258 | 4.227 | 4.295 | VV | 866 | 10532 | 0.11% | 0.030% |
| 6 | 4.314 | 4.295 | 4.337 | PV | 3938 | 40217 | 0.43% | 0.115% |
| 7 | 4.369 | 4.337 | 4.383 | VV | 4275 | 50331 | 0.54% | 0.144% |
| 8 | 4.398 | 4.383 | 4.447 | VV | 5842 | 71055 | 0.76% | 0.203% |
| 9 | 4.455 | 4.447 | 4.475 | VV | 347 | 4094 | 0.04% | 0.012% |
| 10 | 4.487 | 4.475 | 4.492 | VV | 603 | 4391 | 0.05% | 0.013% |
| 11 | 4.508 | 4.492 | 4.571 | VV | 955 | 15899 | 0.17% | 0.045% |
| 12 | 4.583 | 4.571 | 4.595 | VV | 578 | 5649 | 0.06% | 0.016% |
| 13 | 4.597 | 4.595 | 4.615 | VV | 582 | 2488 | 0.03% | 0.007% |
| 14 | 4.642 | 4.628 | 4.674 | PV | 211 | 2957 | 0.03% | 0.008% |
| 15 | 4.688 | 4.674 | 4.724 | VV | 784 | 12017 | 0.13% | 0.034% |
| 16 | 4.767 | 4.724 | 4.810 | VV | 12448 | 185799 | 1.99% | 0.530% |
| 17 | 4.826 | 4.810 | 4.864 | VV | 2852 | 36233 | 0.39% | 0.103% |
| 18 | 4.870 | 4.864 | 4.875 | VV | 259 | 1397 | 0.01% | 0.004% |
| 19 | 4.879 | 4.875 | 4.892 | VV | 319 | 1837 | 0.02% | 0.005% |
| 20 | 4.896 | 4.892 | 4.918 | VV | 172 | 1195 | 0.01% | 0.003% |
| 21 | 4.934 | 4.918 | 4.941 | VV | 302 | 1773 | 0.02% | 0.005% |
| 22 | 4.966 | 4.941 | 4.980 | VV | 531 | 6842 | 0.07% | 0.020% |
| 23 | 4.986 | 4.980 | 5.027 | VV | 335 | 6706 | 0.07% | 0.019% |
| 24 | 5.069 | 5.035 | 5.119 | VV | 1457 | 51559 | 0.55% | 0.147% |
| 25 | 5.134 | 5.119 | 5.150 | VV | 1005 | 14791 | 0.16% | 0.042% |
| 26 | 5.178 | 5.150 | 5.194 | VV | 1762 | 28242 | 0.30% | 0.081% |
| 27 | 5.211 | 5.194 | 5.236 | VV | 4694 | 56781 | 0.61% | 0.162% |
| 28 | 5.242 | 5.236 | 5.247 | VV | 655 | 4050 | 0.04% | 0.012% |
| 29 | 5.251 | 5.247 | 5.253 | VV | 657 | 2314 | 0.02% | 0.007% |
| 30 | 5.268 | 5.253 | 5.295 | VV | 1427 | 19602 | 0.21% | 0.056% |
| 31 | 5.313 | 5.295 | 5.324 | VV | 531 | 6617 | 0.07% | 0.019% |
| 32 | 5.333 | 5.324 | 5.359 | VV | 720 | 11150 | 0.12% | 0.032% |
| 33 | 5.363 | 5.359 | 5.376 | VV | 553 | 3930 | 0.04% | 0.011% |
| 34 | 5.383 | 5.376 | 5.409 | VV | 313 | 4494 | 0.05% | 0.013% |
| 35 | 5.422 | 5.409 | 5.439 | VV | 442 | 3951 | 0.04% | 0.011% |
| 36 | 5.464 | 5.439 | 5.510 | PV | 647 | 12416 | 0.13% | 0.035% |

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|---|---|---|---|---|---|---|---|---|
| 37 | 5.522 | 5.510 | 5.528 | VV | 388 | 3138 | 0.03% | 0.009% |
| 38 | 5.539 | 5.528 | 5.552 | VV | 340 | 3891 | 0.04% | 0.011% |
| 39 | 5.558 | 5.552 | 5.576 | VV | 307 | 3389 | 0.04% | 0.010% |
| 40 | 5.583 | 5.576 | 5.593 | VV | 249 | 1422 | 0.02% | 0.004% |
| 41 | 5.608 | 5.593 | 5.614 | PV | 240 | 1641 | 0.02% | 0.005% |
| 42 | 5.619 | 5.614 | 5.629 | VV | 301 | 1438 | 0.02% | 0.004% |
| 43 | 5.639 | 5.629 | 5.655 | VV | 299 | 3167 | 0.03% | 0.009% |
| 44 | 5.659 | 5.655 | 5.664 | VV | 254 | 1150 | 0.01% | 0.003% |
| 45 | 5.672 | 5.664 | 5.680 | VV | 396 | 2843 | 0.03% | 0.008% |
| 46 | 5.684 | 5.680 | 5.698 | VV | 363 | 2950 | 0.03% | 0.008% |
| 47 | 5.705 | 5.698 | 5.710 | VV | 381 | 2182 | 0.02% | 0.006% |
| 48 | 5.731 | 5.710 | 5.755 | VV | 700 | 12577 | 0.13% | 0.036% |
| 49 | 5.771 | 5.755 | 5.795 | VV | 1235 | 17738 | 0.19% | 0.051% |
| 50 | 5.812 | 5.795 | 5.850 | VV | 2381 | 38562 | 0.41% | 0.110% |
| 51 | 5.871 | 5.850 | 5.907 | VV | 1973 | 28637 | 0.31% | 0.082% |
| 52 | 5.937 | 5.907 | 5.970 | VV | 1099 | 21908 | 0.23% | 0.062% |
| 53 | 5.980 | 5.970 | 6.034 | VV | 242 | 4815 | 0.05% | 0.014% |
| 54 | 6.045 | 6.034 | 6.057 | VV | 273 | 2026 | 0.02% | 0.006% |
| 55 | 6.062 | 6.057 | 6.075 | VV | 207 | 1464 | 0.02% | 0.004% |
| 56 | 6.106 | 6.075 | 6.129 | VV | 589 | 11074 | 0.12% | 0.032% |
| 57 | 6.151 | 6.129 | 6.194 | VV | 2838 | 48062 | 0.52% | 0.137% |
| 58 | 6.221 | 6.194 | 6.245 | VV | 2131 | 28221 | 0.30% | 0.080% |
| 59 | 6.261 | 6.245 | 6.274 | VV | 1134 | 13205 | 0.14% | 0.038% |
| 60 | 6.291 | 6.274 | 6.312 | VV | 3572 | 42372 | 0.45% | 0.121% |
| 61 | 6.321 | 6.312 | 6.344 | VV | 1082 | 12785 | 0.14% | 0.036% |
| 62 | 6.365 | 6.344 | 6.384 | VV | 1641 | 19390 | 0.21% | 0.055% |
| 63 | 6.390 | 6.384 | 6.399 | VV | 341 | 2598 | 0.03% | 0.007% |
| 64 | 6.416 | 6.399 | 6.452 | VV | 474 | 8307 | 0.09% | 0.024% |
| 65 | 6.454 | 6.452 | 6.462 | VV | 351 | 1331 | 0.01% | 0.004% |
| 66 | 6.478 | 6.462 | 6.494 | VV | 467 | 5789 | 0.06% | 0.017% |
| 67 | 6.504 | 6.494 | 6.533 | VV | 398 | 5345 | 0.06% | 0.015% |
| 68 | 6.543 | 6.533 | 6.553 | VV | 490 | 2790 | 0.03% | 0.008% |
| 69 | 6.579 | 6.553 | 6.607 | PV | 1841 | 22973 | 0.25% | 0.066% |
| 70 | 6.633 | 6.607 | 6.653 | VV | 1959 | 34450 | 0.37% | 0.098% |
| 71 | 6.678 | 6.653 | 6.690 | VV | 2245 | 36719 | 0.39% | 0.105% |
| 72 | 6.702 | 6.690 | 6.729 | VV | 1856 | 27781 | 0.30% | 0.079% |
| 73 | 6.757 | 6.729 | 6.815 | VV | 3736 | 58969 | 0.63% | 0.168% |
| 74 | 6.834 | 6.815 | 6.846 | VV | 548 | 7595 | 0.08% | 0.022% |
| 75 | 6.856 | 6.846 | 6.871 | VV | 814 | 7308 | 0.08% | 0.021% |
| 76 | 6.913 | 6.886 | 6.956 | VV | 8077 | 93291 | 1.00% | 0.266% |
| 77 | 6.987 | 6.956 | 7.009 | VV | 1595 | 30146 | 0.32% | 0.086% |
| 78 | 7.023 | 7.009 | 7.039 | VV | 1977 | 24923 | 0.27% | 0.071% |
| 79 | 7.043 | 7.039 | 7.049 | VV | 1259 | 7797 | 0.08% | 0.022% |
| 80 | 7.060 | 7.049 | 7.079 | VV | 1707 | 21345 | 0.23% | 0.061% |
| 81 | 7.088 | 7.079 | 7.098 | VV | 887 | 9279 | 0.10% | 0.026% |
| 82 | 7.117 | 7.098 | 7.131 | VV | 1487 | 21141 | 0.23% | 0.060% |
| 83 | 7.145 | 7.131 | 7.177 | VV | 1991 | 23195 | 0.25% | 0.066% |
| 84 | 7.182 | 7.177 | 7.190 | VV | 301 | 1775 | 0.02% | 0.005% |
| 85 | 7.193 | 7.190 | 7.202 | VV | 332 | 1711 | 0.02% | 0.005% |
| 86 | 7.216 | 7.202 | 7.227 | VV | 430 | 3539 | 0.04% | 0.010% |
| 87 | 7.257 | 7.242 | 7.272 | PV | 486 | 4391 | 0.05% | 0.013% |
| 88 | 7.275 | 7.272 | 7.285 | VV | 271 | 1799 | 0.02% | 0.005% |
| 89 | 7.314 | 7.285 | 7.329 | VV | 3384 | 37534 | 0.40% | 0.107% |

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|---|---|---|---|---|---|---|---|---|
| 90 | 7.351 | 7.329 | 7.499 | VV | 927212 | 9327776 | 100.00% | 26.604% |
| 91 | 7.504 | 7.499 | 7.507 | VV | 1536 | 6825 | 0.07% | 0.019% |
| 92 | 7.512 | 7.507 | 7.519 | VV | 1674 | 11720 | 0.13% | 0.033% |
| 93 | 7.523 | 7.519 | 7.543 | VV | 1501 | 17134 | 0.18% | 0.049% |
| 94 | 7.548 | 7.543 | 7.550 | VV | 1119 | 5046 | 0.05% | 0.014% |
| 95 | 7.554 | 7.550 | 7.563 | VV | 1128 | 8286 | 0.09% | 0.024% |
| 96 | 7.582 | 7.563 | 7.594 | VV | 1242 | 19114 | 0.20% | 0.055% |
| 97 | 7.598 | 7.594 | 7.606 | VV | 776 | 5257 | 0.06% | 0.015% |
| 98 | 7.623 | 7.606 | 7.650 | VV | 1852 | 27328 | 0.29% | 0.078% |
| 99 | 7.672 | 7.650 | 7.690 | VV | 637 | 13017 | 0.14% | 0.037% |
| 100 | 7.716 | 7.690 | 7.730 | VV | 845 | 14030 | 0.15% | 0.040% |
| 101 | 7.739 | 7.730 | 7.775 | VV | 480 | 9557 | 0.10% | 0.027% |
| 102 | 7.785 | 7.775 | 7.806 | VV | 336 | 3500 | 0.04% | 0.010% |
| 103 | 7.815 | 7.806 | 7.848 | VV | 448 | 4325 | 0.05% | 0.012% |
| 104 | 7.865 | 7.848 | 7.876 | VV | 634 | 6255 | 0.07% | 0.018% |
| 105 | 7.881 | 7.876 | 7.897 | VV | 511 | 5567 | 0.06% | 0.016% |
| 106 | 7.921 | 7.897 | 7.945 | VV | 3222 | 42612 | 0.46% | 0.122% |
| 107 | 7.949 | 7.945 | 7.990 | VV | 925 | 12377 | 0.13% | 0.035% |
| 108 | 8.028 | 7.990 | 8.048 | VV | 1231 | 29434 | 0.32% | 0.084% |
| 109 | 8.065 | 8.048 | 8.093 | VV | 1369 | 18942 | 0.20% | 0.054% |
| 110 | 8.114 | 8.093 | 8.134 | VV | 1201 | 16087 | 0.17% | 0.046% |
| 111 | 8.146 | 8.134 | 8.172 | VV | 1541 | 16341 | 0.18% | 0.047% |
| 112 | 8.201 | 8.172 | 8.358 | PV | 464798 | 6016440 | 64.50% | 17.160% |
| 113 | 8.372 | 8.358 | 8.398 | VV | 3583 | 73957 | 0.79% | 0.211% |
| 114 | 8.412 | 8.398 | 8.420 | VV | 2702 | 32899 | 0.35% | 0.094% |
| 115 | 8.428 | 8.420 | 8.439 | VV | 2669 | 27178 | 0.29% | 0.078% |
| 116 | 8.456 | 8.439 | 8.497 | VV | 3385 | 82847 | 0.89% | 0.236% |
| 117 | 8.516 | 8.497 | 8.548 | VV | 1937 | 36668 | 0.39% | 0.105% |
| 118 | 8.568 | 8.548 | 8.595 | VV | 1460 | 27812 | 0.30% | 0.079% |
| 119 | 8.635 | 8.595 | 8.684 | VV | 105075 | 1151341 | 12.34% | 3.284% |
| 120 | 8.690 | 8.684 | 8.714 | VV | 2564 | 34329 | 0.37% | 0.098% |
| 121 | 8.745 | 8.714 | 8.792 | VV | 7393 | 137931 | 1.48% | 0.393% |
| 122 | 8.795 | 8.792 | 8.805 | VV | 960 | 5913 | 0.06% | 0.017% |
| 123 | 8.825 | 8.805 | 8.854 | VV | 2358 | 38990 | 0.42% | 0.111% |
| 124 | 8.870 | 8.854 | 8.900 | VV | 1382 | 24651 | 0.26% | 0.070% |
| 125 | 8.904 | 8.900 | 8.908 | VV | 644 | 2741 | 0.03% | 0.008% |
| 126 | 8.946 | 8.908 | 8.971 | VV | 955 | 26718 | 0.29% | 0.076% |
| 127 | 8.975 | 8.971 | 8.997 | VV | 591 | 6922 | 0.07% | 0.020% |
| 128 | 9.019 | 8.997 | 9.032 | VV | 1173 | 18042 | 0.19% | 0.051% |
| 129 | 9.038 | 9.032 | 9.069 | VV | 1124 | 14344 | 0.15% | 0.041% |
| 130 | 9.094 | 9.069 | 9.128 | VV | 2461 | 35119 | 0.38% | 0.100% |
| 131 | 9.167 | 9.147 | 9.219 | VV | 443 | 11983 | 0.13% | 0.034% |
| 132 | 9.238 | 9.219 | 9.264 | VV | 1094 | 13108 | 0.14% | 0.037% |
| 133 | 9.300 | 9.264 | 9.318 | PV | 444 | 9179 | 0.10% | 0.026% |
| 134 | 9.337 | 9.318 | 9.362 | VV | 2249 | 27529 | 0.30% | 0.079% |
| 135 | 9.385 | 9.362 | 9.492 | VV | 19028 | 504375 | 5.41% | 1.439% |
| 136 | 9.514 | 9.492 | 9.561 | VV | 3125 | 73001 | 0.78% | 0.208% |
| 137 | 9.582 | 9.561 | 9.626 | VV | 1486 | 46222 | 0.50% | 0.132% |
| 138 | 9.634 | 9.626 | 9.642 | VV | 910 | 7776 | 0.08% | 0.022% |
| 139 | 9.652 | 9.642 | 9.673 | VV | 956 | 12590 | 0.13% | 0.036% |
| 140 | 9.682 | 9.673 | 9.741 | VV | 662 | 10367 | 0.11% | 0.030% |
| 141 | 9.757 | 9.741 | 9.761 | VV | 301 | 2163 | 0.02% | 0.006% |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 142 | 9.789 | 9.761 | 9.801 | VV | 777 | 12989 | 0.14% | 0.037% |
| 143 | 9.822 | 9.801 | 9.847 | VV | 1591 | 26035 | 0.28% | 0.074% |
| 144 | 9.861 | 9.847 | 9.869 | VV | 644 | 7058 | 0.08% | 0.020% |
| 145 | 9.903 | 9.869 | 9.920 | VV | 1258 | 25525 | 0.27% | 0.073% |
| 146 | 9.934 | 9.920 | 9.960 | VV | 1147 | 20271 | 0.22% | 0.058% |
| 147 | 10.011 | 9.960 | 10.049 | VV | 2493 | 49009 | 0.53% | 0.140% |
| 148 | 10.053 | 10.049 | 10.059 | VV | 403 | 1610 | 0.02% | 0.005% |
| 149 | 10.071 | 10.059 | 10.079 | VV | 427 | 3645 | 0.04% | 0.010% |
| 150 | 10.102 | 10.079 | 10.116 | VV | 1327 | 19872 | 0.21% | 0.057% |
| 151 | 10.137 | 10.116 | 10.158 | VV | 1312 | 20464 | 0.22% | 0.058% |
| 152 | 10.181 | 10.158 | 10.205 | VV | 1630 | 29493 | 0.32% | 0.084% |
| 153 | 10.216 | 10.205 | 10.228 | VV | 809 | 9743 | 0.10% | 0.028% |
| 154 | 10.254 | 10.228 | 10.279 | VV | 1700 | 33887 | 0.36% | 0.097% |
| 155 | 10.293 | 10.279 | 10.308 | VV | 1126 | 14541 | 0.16% | 0.041% |
| 156 | 10.328 | 10.308 | 10.336 | VV | 1104 | 14631 | 0.16% | 0.042% |
| 157 | 10.363 | 10.336 | 10.385 | VV | 3886 | 58730 | 0.63% | 0.168% |
| 158 | 10.407 | 10.385 | 10.421 | VV | 864 | 15771 | 0.17% | 0.045% |
| 159 | 10.427 | 10.421 | 10.435 | VV | 645 | 4632 | 0.05% | 0.013% |
| 160 | 10.457 | 10.435 | 10.477 | VV | 979 | 17257 | 0.19% | 0.049% |
| 161 | 10.493 | 10.477 | 10.511 | VV | 680 | 9575 | 0.10% | 0.027% |
| 162 | 10.525 | 10.511 | 10.545 | VV | 770 | 12293 | 0.13% | 0.035% |
| 163 | 10.563 | 10.545 | 10.581 | VV | 862 | 12385 | 0.13% | 0.035% |
| 164 | 10.600 | 10.581 | 10.617 | VV | 644 | 9787 | 0.10% | 0.028% |
| 165 | 10.632 | 10.617 | 10.643 | VV | 743 | 7870 | 0.08% | 0.022% |
| 166 | 10.660 | 10.643 | 10.685 | VV | 1913 | 24759 | 0.27% | 0.071% |
| 167 | 10.698 | 10.685 | 10.717 | VV | 839 | 9571 | 0.10% | 0.027% |
| 168 | 10.727 | 10.717 | 10.745 | VV | 460 | 6428 | 0.07% | 0.018% |
| 169 | 10.753 | 10.745 | 10.762 | VV | 431 | 3198 | 0.03% | 0.009% |
| 170 | 10.768 | 10.762 | 10.776 | VV | 429 | 2977 | 0.03% | 0.008% |
| 171 | 10.790 | 10.776 | 10.810 | VV | 372 | 6311 | 0.07% | 0.018% |
| 172 | 10.845 | 10.810 | 10.851 | VV | 475 | 8223 | 0.09% | 0.023% |
| 173 | 10.877 | 10.851 | 10.905 | VV | 1208 | 20379 | 0.22% | 0.058% |
| 174 | 10.911 | 10.905 | 10.915 | VV | 276 | 1263 | 0.01% | 0.004% |
| 175 | 10.943 | 10.915 | 10.979 | VV | 2273 | 35821 | 0.38% | 0.102% |
| 176 | 11.017 | 10.979 | 11.021 | VV | 734 | 13719 | 0.15% | 0.039% |
| 177 | 11.032 | 11.021 | 11.054 | VV | 968 | 13347 | 0.14% | 0.038% |
| 178 | 11.058 | 11.054 | 11.079 | VV | 499 | 5767 | 0.06% | 0.016% |
| 179 | 11.093 | 11.079 | 11.110 | VV | 488 | 5962 | 0.06% | 0.017% |
| 180 | 11.121 | 11.110 | 11.126 | VV | 379 | 2765 | 0.03% | 0.008% |
| 181 | 11.129 | 11.126 | 11.132 | VV | 289 | 1185 | 0.01% | 0.003% |
| 182 | 11.154 | 11.132 | 11.200 | VV | 586 | 12780 | 0.14% | 0.036% |
| 183 | 11.237 | 11.200 | 11.355 | PV | 779933 | 8439531 | 90.48% | 24.070% |
| 184 | 11.361 | 11.355 | 11.376 | VV | 1005 | 10298 | 0.11% | 0.029% |
| 185 | 11.409 | 11.376 | 11.437 | VV | 2087 | 42811 | 0.46% | 0.122% |
| 186 | 11.452 | 11.437 | 11.459 | VV | 655 | 7408 | 0.08% | 0.021% |
| 187 | 11.471 | 11.459 | 11.474 | VV | 540 | 4458 | 0.05% | 0.013% |
| 188 | 11.478 | 11.474 | 11.487 | VV | 543 | 3583 | 0.04% | 0.010% |
| 189 | 11.514 | 11.487 | 11.524 | VV | 849 | 15240 | 0.16% | 0.043% |
| 190 | 11.531 | 11.524 | 11.544 | VV | 796 | 7370 | 0.08% | 0.021% |
| 191 | 11.593 | 11.544 | 11.617 | VV | 1761 | 54121 | 0.58% | 0.154% |
| 192 | 11.669 | 11.617 | 11.716 | VV | 6028 | 118036 | 1.27% | 0.337% |
| 193 | 11.732 | 11.716 | 11.746 | VV | 1402 | 18787 | 0.20% | 0.054% |
| 194 | 11.758 | 11.746 | 11.782 | VV | 1269 | 21154 | 0.23% | 0.060% |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 195 | 11.816 | 11.782 | 11.840 | VV | 2666 | 59641 | 0.64% | 0.170% |
| 196 | 11.860 | 11.840 | 11.927 | VV | 24312 | 414369 | 4.44% | 1.182% |
| 197 | 11.938 | 11.927 | 11.967 | VV | 2511 | 45297 | 0.49% | 0.129% |
| 198 | 11.980 | 11.967 | 11.996 | VV | 1620 | 24767 | 0.27% | 0.071% |
| 199 | 12.014 | 11.996 | 12.053 | VV | 1496 | 44115 | 0.47% | 0.126% |
| 200 | 12.077 | 12.053 | 12.081 | VV | 1938 | 26255 | 0.28% | 0.075% |
| 201 | 12.103 | 12.081 | 12.134 | VV | 8413 | 122473 | 1.31% | 0.349% |
| 202 | 12.148 | 12.134 | 12.157 | VV | 934 | 11334 | 0.12% | 0.032% |
| 203 | 12.179 | 12.157 | 12.215 | VV | 1897 | 32806 | 0.35% | 0.094% |
| 204 | 12.242 | 12.215 | 12.280 | VV | 2853 | 47625 | 0.51% | 0.136% |
| 205 | 12.308 | 12.280 | 12.353 | VV | 3025 | 53090 | 0.57% | 0.151% |
| 206 | 12.375 | 12.353 | 12.395 | VV | 529 | 9451 | 0.10% | 0.027% |
| 207 | 12.399 | 12.395 | 12.421 | VV | 342 | 3833 | 0.04% | 0.011% |
| 208 | 12.435 | 12.421 | 12.443 | VV | 338 | 2539 | 0.03% | 0.007% |
| 209 | 12.507 | 12.459 | 12.546 | PV | 668 | 21097 | 0.23% | 0.060% |
| 210 | 12.556 | 12.546 | 12.577 | VV | 542 | 6575 | 0.07% | 0.019% |
| 211 | 12.599 | 12.577 | 12.610 | VV | 733 | 9715 | 0.10% | 0.028% |
| 212 | 12.634 | 12.610 | 12.647 | VV | 1117 | 20270 | 0.22% | 0.058% |
| 213 | 12.676 | 12.647 | 12.719 | VV | 162731 | 1918115 | 20.56% | 5.471% |
| 214 | 12.741 | 12.719 | 12.779 | VV | 1435 | 37025 | 0.40% | 0.106% |
| 215 | 12.783 | 12.779 | 12.794 | VV | 812 | 6447 | 0.07% | 0.018% |
| 216 | 12.801 | 12.794 | 12.818 | VV | 762 | 10359 | 0.11% | 0.030% |
| 217 | 12.857 | 12.818 | 12.874 | VV | 1095 | 30941 | 0.33% | 0.088% |
| 218 | 12.913 | 12.874 | 12.942 | VV | 4278 | 79069 | 0.85% | 0.226% |
| 219 | 12.960 | 12.942 | 12.971 | VV | 784 | 12184 | 0.13% | 0.035% |
| 220 | 12.997 | 12.971 | 13.019 | VV | 820 | 20083 | 0.22% | 0.057% |
| 221 | 13.040 | 13.019 | 13.068 | VV | 1277 | 29148 | 0.31% | 0.083% |
| 222 | 13.090 | 13.068 | 13.165 | VV | 8239 | 208035 | 2.23% | 0.593% |
| 223 | 13.171 | 13.165 | 13.214 | VV | 1276 | 28153 | 0.30% | 0.080% |
| 224 | 13.224 | 13.214 | 13.241 | VV | 977 | 13153 | 0.14% | 0.038% |
| 225 | 13.280 | 13.241 | 13.292 | VV | 1139 | 26604 | 0.29% | 0.076% |
| 226 | 13.299 | 13.292 | 13.319 | VV | 1045 | 14196 | 0.15% | 0.040% |
| 227 | 13.334 | 13.319 | 13.347 | VV | 925 | 13750 | 0.15% | 0.039% |
| 228 | 13.390 | 13.347 | 13.412 | VV | 2422 | 61347 | 0.66% | 0.175% |
| 229 | 13.431 | 13.412 | 13.465 | VV | 2806 | 44666 | 0.48% | 0.127% |
| 230 | 13.475 | 13.465 | 13.507 | VV | 614 | 10825 | 0.12% | 0.031% |
| 231 | 13.519 | 13.507 | 13.541 | VV | 454 | 6834 | 0.07% | 0.019% |
| 232 | 13.550 | 13.541 | 13.604 | VV | 328 | 5086 | 0.05% | 0.015% |
| 233 | 13.650 | 13.624 | 13.666 | VV | 254 | 5408 | 0.06% | 0.015% |
| 234 | 13.725 | 13.666 | 13.747 | VV | 480 | 13286 | 0.14% | 0.038% |
| 235 | 13.756 | 13.747 | 13.815 | VV | 439 | 11143 | 0.12% | 0.032% |
| 236 | 13.880 | 13.815 | 13.937 | VV | 1757 | 64057 | 0.69% | 0.183% |
| 237 | 13.944 | 13.937 | 13.972 | VV | 745 | 12709 | 0.14% | 0.036% |
| 238 | 13.997 | 13.972 | 14.013 | VV | 687 | 12192 | 0.13% | 0.035% |
| 239 | 14.052 | 14.013 | 14.070 | VV | 701 | 17327 | 0.19% | 0.049% |
| 240 | 14.114 | 14.070 | 14.138 | VV | 907 | 30367 | 0.33% | 0.087% |
| 241 | 14.158 | 14.138 | 14.223 | VV | 825 | 34688 | 0.37% | 0.099% |
| 242 | 14.240 | 14.223 | 14.260 | VV | 789 | 15124 | 0.16% | 0.043% |
| 243 | 14.294 | 14.260 | 14.315 | VV | 893 | 26598 | 0.29% | 0.076% |
| 244 | 14.330 | 14.315 | 14.359 | VV | 926 | 19343 | 0.21% | 0.055% |
| 245 | 14.393 | 14.359 | 14.425 | VV | 823 | 22522 | 0.24% | 0.064% |
| 246 | 14.453 | 14.425 | 14.467 | VV | 565 | 11330 | 0.12% | 0.032% |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 247 | 14.495 | 14.467 | 14.512 | VV | 2064 | 38891 | 0.42% | 0.111% |
| 248 | 14.528 | 14.512 | 14.561 | VV | 2929 | 47734 | 0.51% | 0.136% |
| 249 | 14.584 | 14.561 | 14.670 | VV | 1823 | 36943 | 0.40% | 0.105% |
| 250 | 14.698 | 14.670 | 14.770 | VV | 1034 | 23190 | 0.25% | 0.066% |
| 251 | 14.799 | 14.770 | 14.819 | VV | 336 | 7270 | 0.08% | 0.021% |
| 252 | 14.839 | 14.819 | 14.869 | VV | 537 | 10213 | 0.11% | 0.029% |
| 253 | 14.905 | 14.869 | 15.030 | VV | 24588 | 492295 | 5.28% | 1.404% |
| 254 | 15.066 | 15.030 | 15.148 | VV | 2847 | 82612 | 0.89% | 0.236% |
| 255 | 15.170 | 15.148 | 15.213 | VV | 824 | 26730 | 0.29% | 0.076% |
| 256 | 15.243 | 15.213 | 15.267 | VV | 1358 | 27597 | 0.30% | 0.079% |
| 257 | 15.276 | 15.267 | 15.309 | VV | 436 | 9726 | 0.10% | 0.028% |
| 258 | 15.339 | 15.309 | 15.354 | VV | 826 | 15746 | 0.17% | 0.045% |
| 259 | 15.388 | 15.354 | 15.419 | VV | 956 | 28561 | 0.31% | 0.081% |
| 260 | 15.435 | 15.419 | 15.478 | VV | 1206 | 25110 | 0.27% | 0.072% |
| 261 | 15.505 | 15.478 | 15.521 | VV | 1168 | 19495 | 0.21% | 0.056% |
| 262 | 15.543 | 15.521 | 15.570 | VV | 2366 | 40467 | 0.43% | 0.115% |
| 263 | 15.584 | 15.570 | 15.603 | VV | 916 | 13817 | 0.15% | 0.039% |
| 264 | 15.619 | 15.603 | 15.655 | VV | 621 | 11891 | 0.13% | 0.034% |
| 265 | 15.658 | 15.655 | 15.674 | VV | 187 | 1350 | 0.01% | 0.004% |
| 266 | 15.705 | 15.674 | 15.736 | VV | 321 | 6175 | 0.07% | 0.018% |
| 267 | 15.753 | 15.736 | 15.780 | VV | 372 | 5634 | 0.06% | 0.016% |
| 268 | 15.786 | 15.780 | 15.814 | VV | 190 | 3084 | 0.03% | 0.009% |
| 269 | 15.826 | 15.814 | 15.844 | VV | 340 | 2660 | 0.03% | 0.008% |
| 270 | 15.864 | 15.844 | 15.890 | PV | 343 | 4899 | 0.05% | 0.014% |
| 271 | 15.925 | 15.890 | 15.976 | VV | 2183 | 55271 | 0.59% | 0.158% |
| 272 | 15.985 | 15.976 | 16.002 | VV | 1017 | 11851 | 0.13% | 0.034% |
| 273 | 16.025 | 16.002 | 16.057 | VV | 1171 | 26455 | 0.28% | 0.075% |
| 274 | 16.063 | 16.057 | 16.080 | VV | 569 | 6674 | 0.07% | 0.019% |
| 275 | 16.119 | 16.080 | 16.157 | VV | 1291 | 36316 | 0.39% | 0.104% |
| 276 | 16.174 | 16.157 | 16.183 | VV | 607 | 9363 | 0.10% | 0.027% |
| 277 | 16.227 | 16.183 | 16.308 | VV | 1028 | 58833 | 0.63% | 0.168% |
| 278 | 16.327 | 16.308 | 16.364 | VV | 910 | 23713 | 0.25% | 0.068% |
| 279 | 16.401 | 16.364 | 16.425 | VV | 1241 | 31746 | 0.34% | 0.091% |
| 280 | 16.454 | 16.425 | 16.469 | VV | 1719 | 31099 | 0.33% | 0.089% |
| 281 | 16.488 | 16.469 | 16.510 | VV | 2972 | 46354 | 0.50% | 0.132% |
| 282 | 16.532 | 16.510 | 16.562 | VV | 3162 | 50999 | 0.55% | 0.145% |
| 283 | 16.583 | 16.562 | 16.610 | VV | 994 | 19938 | 0.21% | 0.057% |
| 284 | 16.618 | 16.610 | 16.629 | VV | 479 | 4295 | 0.05% | 0.012% |
| 285 | 16.662 | 16.629 | 16.686 | VV | 505 | 13670 | 0.15% | 0.039% |
| 286 | 16.698 | 16.686 | 16.728 | VV | 404 | 7157 | 0.08% | 0.020% |
| 287 | 16.805 | 16.728 | 16.834 | PV | 718 | 18874 | 0.20% | 0.054% |
| 288 | 16.859 | 16.834 | 16.912 | VV | 1261 | 32686 | 0.35% | 0.093% |
| 289 | 16.937 | 16.912 | 16.994 | VV | 2578 | 43168 | 0.46% | 0.123% |
| 290 | 17.027 | 16.994 | 17.066 | VV | 588 | 17580 | 0.19% | 0.050% |
| 291 | 17.073 | 17.066 | 17.081 | VV | 464 | 3283 | 0.04% | 0.009% |
| 292 | 17.095 | 17.081 | 17.105 | VV | 374 | 4921 | 0.05% | 0.014% |
| 293 | 17.115 | 17.105 | 17.139 | VV | 453 | 6973 | 0.07% | 0.020% |
| 294 | 17.169 | 17.139 | 17.230 | VV | 545 | 20368 | 0.22% | 0.058% |
| 295 | 17.240 | 17.230 | 17.258 | VV | 253 | 4340 | 0.05% | 0.012% |
| 296 | 17.274 | 17.258 | 17.282 | VV | 332 | 4287 | 0.05% | 0.012% |
| 297 | 17.342 | 17.282 | 17.350 | VV | 1764 | 37344 | 0.40% | 0.107% |
| 298 | 17.370 | 17.350 | 17.401 | VV | 3532 | 57015 | 0.61% | 0.163% |
| 299 | 17.412 | 17.401 | 17.430 | VV | 392 | 6024 | 0.06% | 0.017% |

rteres

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 300 | 17.462 | 17.430 | 17.540 | VV | 3874 | 74254 | 0.80% | 0.212% |
| 301 | 17.573 | 17.540 | 17.613 | VV | 560 | 11119 | 0.12% | 0.032% |
| 302 | 17.664 | 17.613 | 17.692 | PV | 631 | 15297 | 0.16% | 0.044% |
| 303 | 17.726 | 17.692 | 17.770 | VV | 10983 | 212209 | 2.28% | 0.605% |
| 304 | 17.790 | 17.770 | 17.867 | VV | 3665 | 84212 | 0.90% | 0.240% |
| 305 | 17.898 | 17.867 | 17.914 | VV | 646 | 14171 | 0.15% | 0.040% |
| 306 | 17.927 | 17.914 | 17.975 | VV | 525 | 8247 | 0.09% | 0.024% |
| 307 | 18.000 | 17.975 | 18.014 | PV | 433 | 5034 | 0.05% | 0.014% |
| 308 | 18.027 | 18.014 | 18.035 | VV | 264 | 2057 | 0.02% | 0.006% |
| 309 | 18.056 | 18.035 | 18.090 | VV | 500 | 6627 | 0.07% | 0.019% |
| 310 | 18.198 | 18.090 | 18.264 | VV | 3292 | 81894 | 0.88% | 0.234% |

Sum of corrected areas: 35061727

Aromatic EPH 021125.M Sat Mar 01 03:59:36 2025

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Weston Solutions, Inc. | Date Collected: | 02/24/25 |
| Project: | RFP 905 | Date Received: | 02/24/25 |
| Client Sample ID: | P001-CLAY-CF01-02 | SDG No.: | Q1421 |
| Lab Sample ID: | Q1421-08 | Matrix: | Water |
| Analytical Method: | NJEPH | % Solid: | 0 |
| Sample Wt/Vol: | 1000 Units: mL | Final Vol: | 2000 uL |
| Soil Aliquot Vol: | uL | Test: | EPH |
| Prep Method : | SW3510 | | |

| Prep Date : | Date Analyzed : | Prep Batch ID |
|---|---|---|
| 02/26/25 11:45 | 02/27/25 15:17 | PB166883 |

| CAS Number | Parameter | Conc. | Qualifier | Dilution | MDL | LOQ / CRQL | Units | Datafile |
|---|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | | |
| Aliphatic C9-C12 | Aliphatic C9-C12 | 5.76 | U | 1 | 5.76 | 30.0 | ug/l | FC068314.D |
| Aliphatic C12-C16 | Aliphatic C12-C16 | 7.61 | J | 1 | 3.61 | 20.0 | ug/l | FC068314.D |
| Aliphatic C16-C21 | Aliphatic C16-C21 | 5.14 | U | 1 | 5.14 | 30.0 | ug/l | FC068314.D |
| Aliphatic C21-C28 | Aliphatic C21-C28 | 8.97 | U | 1 | 8.97 | 40.0 | ug/l | FC068314.D |
| Aliphatic C28-C40 | Aliphatic C28-C40 | 17.0 | U | 1 | 17.0 | 60.0 | ug/l | FC068314.D |
| Aromatic C10-C12 | Aromatic C10-C12 | 10.5 | J | 1 | 3.32 | 20.0 | ug/l | FD049123.D |
| Aromatic C12-C16 | Aromatic C12-C16 | 14.4 | J | 1 | 3.69 | 30.0 | ug/l | FD049123.D |
| Aromatic C16-C21 | Aromatic C16-C21 | 48.3 | J | 1 | 12.7 | 50.0 | ug/l | FD049123.D |
| Aromatic C21-C36 | Aromatic C21-C36 | 92.7 | | 1 | 25.2 | 80.0 | ug/l | FD049123.D |
| Total AliphaticEPH | Total AliphaticEPH | 40.5 | U | | 40.5 | 180 | ug/l | |
| Total AromaticEPH | Total AromaticEPH | 166 | J | | 44.9 | 180 | ug/l | |
| Total EPH | Total EPH | 174 | J | | 85.4 | 360 | ug/l | |

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control 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

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Weston Solutions, Inc. | Date Collected: | 02/24/25 |
| Project: | RFP 905 | Date Received: | 02/24/25 |
| Client Sample ID: | P001-CLAY-CF01-02 | SDG No.: | Q1421 |
| Lab Sample ID: | Q1421-08 | Matrix: | Water |
| Analytical Method: | NJEPH | % Solid: | 0 |
| Sample Wt/Vol: | 1000 Units: mL | Final Vol: | 2000 uL |
| Soil Aliquot Vol: | uL | Test: | EPH |
| Prep Method : | SW3510 | | |

| File ID : | Dilution: | Prep Date : | Date Analyzed : | Prep Batch ID |
|---|---|---|---|---|
| FC068314.D | 1 | 02/26/25 | 02/27/25 | PB166883 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| Aliphatic C9-C12 | Aliphatic C9-C12 | 5.76 | U | 5.76 | 30.0 | ug/l |
| Aliphatic C12-C16 | Aliphatic C12-C16 | 7.61 | J | 3.61 | 20.0 | ug/l |
| Aliphatic C16-C21 | Aliphatic C16-C21 | 5.14 | U | 5.14 | 30.0 | ug/l |
| Aliphatic C21-C28 | Aliphatic C21-C28 | 8.97 | U | 8.97 | 40.0 | ug/l |
| Aliphatic C28-C40 | Aliphatic C28-C40 | 17.0 | U | 17.0 | 60.0 | ug/l |
| **SURROGATES** | | | | | | |
| 3383-33-2 | 1-chlorooctadecane (SURR) | 32.8 | | 40 - 140 | 66% | SPK: 50 |
| 84-15-1 | ortho-Terphenyl (SURR) | 0.00 | | 40 - 140 | 0% | SPK: 50 |

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

# Quantitation Report For Aliphatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | Q1421-08 | Acq On: | 27 Feb 2025 15:17 |
| Client Sample ID: | P001-CLAY-CF01-02 | Operator: | YP/AJ |
| Data file: | FC068314.D | Misc: | |
| Instrument: | FID_C | ALS Vial: | 17 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aliphatic C9-C12 | 3.104 | 6.370 | 320371 | 2.272 | 300 | ug/ml |
| Aliphatic C12-C16 | 6.371 | 9.754 | 520165 | 3.806 | 200 | ug/ml |
| Aliphatic C16-C21 | 9.755 | 13.108 | 457228 | 3.474 | 300 | ug/ml |
| Aliphatic C21-C28 | 13.109 | 16.762 | 555317 | 4.526 | 400 | ug/ml |
| Aliphatic C28-C40 | 16.763 | 21.566 | 2645290 | 25.721 | 600 | ug/ml |
| Aliphatic EPH | 3.104 | 21.566 | 4498371 | 39.798 | | ug/ml |
| ortho-Terphenyl (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |
| 1-chlorooctadecane (SURR) | 12.840 | 12.840 | 3691135 | 32.82 | | ug/ml |
| Aliphatic C9-C28 | 3.104 | 16.762 | 1853081 | 14.078 | 1200 | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022725AL\
Data File : FC068314.D
Signal(s) : FID1A.ch
Acq On : 27 Feb 2025 15:17
Operator : YP/AJ
Sample : Q1421-08
Misc :
ALS Vial : 17 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
P001-CLAY-CF01-02

Integration File: autoint1.e
Quant Time: Mar 05 04:44:51 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

| Compound | R.T. | Response | Conc Units |
|---|---|---|---|
| System Monitoring Compounds | | | |
| 12) S 1-chlorooctadecane (S... | 12.840 | 3691135 | 32.818 ug/ml |
| Spiked Amount 50.000 | | Recovery = 65.64% | |
| Target Compounds | | | |

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

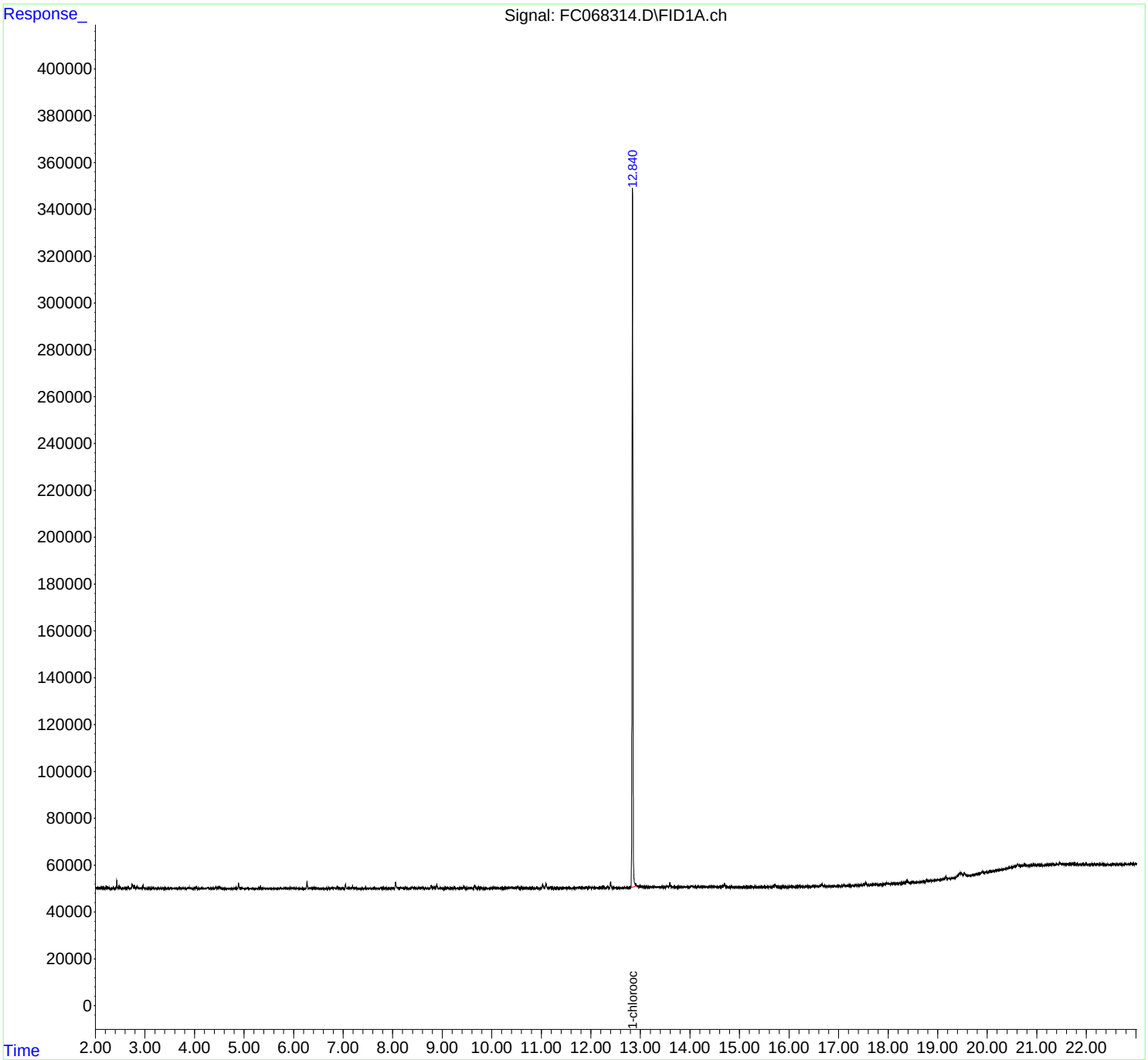
Quantitation Report (QT Reviewed)

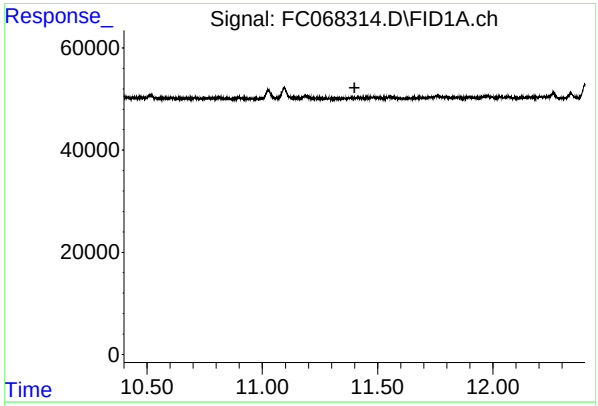
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022725AL\
Data File : FC068314.D
Signal(s) : FID1A.ch
Acq On : 27 Feb 2025 15:17
Operator : YP/AJ
Sample : Q1421-08
Misc :
ALS Vial : 17 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
P001-CLAY-CF01-02

Integration File: autoint1.e
Quant Time: Mar 05 04:44:51 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

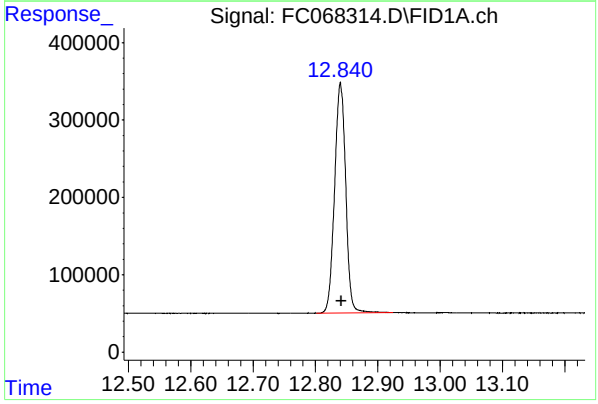





#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.400 min
Response: 0
Conc: N.D.

**Instrument :**
FID_C
**ClientSampleId :**
P001-CLAY-CF01-02




#12 1-chlorooctadecane (SURR)

R.T.: 12.840 min
Delta R.T.: -0.001 min
Response: 3691135
Conc: 32.82 ug/ml

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022725AL\
Data File : FC068314.D
Signal(s) : FID1A.ch
Acq On : 27 Feb 2025 15:17
Sample : Q1421-08
Misc :
ALS Vial : 17 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Title : GC Extractables

Signal : FID1A.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 2.359 | 2.304 | 2.403 | BV | 283 | 1902 | 0.05% | 0.022% |
| 2 | 2.432 | 2.403 | 2.454 | PV | 3378 | 26569 | 0.71% | 0.307% |
| 3 | 2.472 | 2.454 | 2.511 | VV | 646 | 7138 | 0.19% | 0.083% |
| 4 | 2.524 | 2.511 | 2.535 | VV | 78 | 927 | 0.02% | 0.011% |
| 5 | 2.542 | 2.535 | 2.551 | VV | 66 | 447 | 0.01% | 0.005% |
| 6 | 2.558 | 2.551 | 2.581 | PV | 127 | 1748 | 0.05% | 0.020% |
| 7 | 2.590 | 2.581 | 2.631 | VV | 212 | 2676 | 0.07% | 0.031% |
| 8 | 2.655 | 2.631 | 2.682 | VV | 502 | 6287 | 0.17% | 0.073% |
| 9 | 2.741 | 2.682 | 2.771 | PV | 1803 | 27107 | 0.72% | 0.313% |
| 10 | 2.788 | 2.771 | 2.820 | VV | 1256 | 13625 | 0.36% | 0.158% |
| 11 | 2.838 | 2.820 | 2.902 | VV | 1090 | 15257 | 0.41% | 0.176% |
| 12 | 2.918 | 2.902 | 2.940 | VV | 186 | 2726 | 0.07% | 0.032% |
| 13 | 2.961 | 2.940 | 3.011 | VV | 1372 | 15031 | 0.40% | 0.174% |
| 14 | 3.051 | 3.011 | 3.100 | VV | 165 | 5507 | 0.15% | 0.064% |
| 15 | 3.112 | 3.100 | 3.128 | VV | 104 | 1359 | 0.04% | 0.016% |
| 16 | 3.208 | 3.128 | 3.326 | VV | 239 | 11287 | 0.30% | 0.130% |
| 17 | 3.340 | 3.326 | 3.375 | VV | 135 | 1569 | 0.04% | 0.018% |
| 18 | 3.477 | 3.375 | 3.507 | VV | 204 | 6983 | 0.19% | 0.081% |
| 19 | 3.526 | 3.507 | 3.562 | VV | 209 | 3351 | 0.09% | 0.039% |
| 20 | 3.573 | 3.562 | 3.678 | VV | 134 | 5200 | 0.14% | 0.060% |
| 21 | 3.695 | 3.678 | 3.757 | VV | 244 | 5779 | 0.15% | 0.067% |
| 22 | 3.774 | 3.757 | 3.822 | VV | 261 | 4778 | 0.13% | 0.055% |
| 23 | 3.865 | 3.822 | 3.881 | PV | 354 | 5607 | 0.15% | 0.065% |
| 24 | 3.893 | 3.881 | 3.921 | VV | 579 | 6700 | 0.18% | 0.077% |
| 25 | 3.929 | 3.921 | 3.944 | VV | 105 | 1388 | 0.04% | 0.016% |
| 26 | 3.957 | 3.944 | 3.981 | VV | 212 | 2459 | 0.07% | 0.028% |
| 27 | 4.036 | 3.981 | 4.126 | VV | 583 | 16604 | 0.44% | 0.192% |
| 28 | 4.134 | 4.126 | 4.141 | VV | 92 | 848 | 0.02% | 0.010% |
| 29 | 4.156 | 4.141 | 4.220 | VV | 167 | 6034 | 0.16% | 0.070% |
| 30 | 4.233 | 4.220 | 4.242 | VV | 158 | 1398 | 0.04% | 0.016% |
| 31 | 4.263 | 4.242 | 4.286 | VV | 529 | 7916 | 0.21% | 0.092% |
| 32 | 4.299 | 4.286 | 4.347 | VV | 263 | 6011 | 0.16% | 0.069% |
| 33 | 4.369 | 4.347 | 4.394 | VV | 333 | 6329 | 0.17% | 0.073% |
| 34 | 4.428 | 4.394 | 4.468 | VV | 796 | 13782 | 0.37% | 0.159% |
| 35 | 4.484 | 4.468 | 4.497 | VV | 575 | 5907 | 0.16% | 0.068% |
| 36 | 4.514 | 4.497 | 4.569 | VV | 1015 | 12328 | 0.33% | 0.143% |

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|---|---|---|---|---|---|---|---|---|
| 37 | 4.631 | 4.569 | 4.648 | VV | 151 | 3688 | 0.10% | 0.043% |
| 38 | 4.656 | 4.648 | 4.694 | VV | 102 | 1678 | 0.04% | 0.019% |
| 39 | 4.707 | 4.694 | 4.734 | VV | 94 | 1575 | 0.04% | 0.018% |
| 40 | 4.748 | 4.734 | 4.776 | VV | 90 | 530 | 0.01% | 0.006% |
| 41 | 4.816 | 4.776 | 4.840 | PV | 144 | 2317 | 0.06% | 0.027% |
| 42 | 4.890 | 4.840 | 4.924 | VV | 2466 | 31044 | 0.83% | 0.359% |
| 43 | 4.947 | 4.924 | 5.044 | VV | 510 | 8903 | 0.24% | 0.103% |
| 44 | 5.084 | 5.044 | 5.120 | VV | 160 | 3849 | 0.10% | 0.044% |
| 45 | 5.151 | 5.120 | 5.194 | VV | 129 | 3700 | 0.10% | 0.043% |
| 46 | 5.208 | 5.194 | 5.231 | VV | 56 | 937 | 0.02% | 0.011% |
| 47 | 5.253 | 5.231 | 5.268 | VV | 135 | 1381 | 0.04% | 0.016% |
| 48 | 5.292 | 5.268 | 5.309 | PV | 397 | 4644 | 0.12% | 0.054% |
| 49 | 5.332 | 5.309 | 5.367 | VV | 845 | 11012 | 0.29% | 0.127% |
| 50 | 5.389 | 5.367 | 5.429 | VV | 229 | 3943 | 0.10% | 0.046% |
| 51 | 5.474 | 5.429 | 5.528 | VV | 183 | 4622 | 0.12% | 0.053% |
| 52 | 5.576 | 5.528 | 5.614 | VV | 157 | 4094 | 0.11% | 0.047% |
| 53 | 5.622 | 5.614 | 5.681 | VV | 113 | 3276 | 0.09% | 0.038% |
| 54 | 5.693 | 5.681 | 5.714 | VV | 85 | 1363 | 0.04% | 0.016% |
| 55 | 5.746 | 5.714 | 5.774 | VV | 327 | 4830 | 0.13% | 0.056% |
| 56 | 5.797 | 5.774 | 5.808 | VV | 162 | 1954 | 0.05% | 0.023% |
| 57 | 5.844 | 5.808 | 5.861 | VV | 290 | 5162 | 0.14% | 0.060% |
| 58 | 5.888 | 5.861 | 5.910 | VV | 266 | 5468 | 0.15% | 0.063% |
| 59 | 5.931 | 5.910 | 5.971 | VV | 454 | 8696 | 0.23% | 0.101% |
| 60 | 5.991 | 5.971 | 6.028 | VV | 342 | 6194 | 0.16% | 0.072% |
| 61 | 6.052 | 6.028 | 6.094 | VV | 255 | 6318 | 0.17% | 0.073% |
| 62 | 6.106 | 6.094 | 6.168 | VV | 106 | 3434 | 0.09% | 0.040% |
| 63 | 6.183 | 6.168 | 6.197 | VV | 120 | 1512 | 0.04% | 0.017% |
| 64 | 6.215 | 6.197 | 6.224 | VV | 142 | 1512 | 0.04% | 0.017% |
| 65 | 6.238 | 6.224 | 6.247 | VV | 150 | 1718 | 0.05% | 0.020% |
| 66 | 6.270 | 6.247 | 6.304 | VV | 3057 | 37136 | 0.99% | 0.429% |
| 67 | 6.317 | 6.304 | 6.335 | VV | 341 | 4056 | 0.11% | 0.047% |
| 68 | 6.352 | 6.335 | 6.373 | VV | 526 | 6208 | 0.17% | 0.072% |
| 69 | 6.387 | 6.373 | 6.402 | VV | 347 | 3505 | 0.09% | 0.041% |
| 70 | 6.418 | 6.402 | 6.438 | VV | 680 | 7423 | 0.20% | 0.086% |
| 71 | 6.452 | 6.438 | 6.472 | VV | 294 | 3299 | 0.09% | 0.038% |
| 72 | 6.489 | 6.472 | 6.538 | VV | 356 | 5376 | 0.14% | 0.062% |
| 73 | 6.542 | 6.538 | 6.558 | VV | 98 | 684 | 0.02% | 0.008% |
| 74 | 6.595 | 6.558 | 6.615 | PV | 91 | 1625 | 0.04% | 0.019% |
| 75 | 6.628 | 6.615 | 6.644 | VV | 103 | 1241 | 0.03% | 0.014% |
| 76 | 6.709 | 6.644 | 6.741 | VV | 440 | 7713 | 0.21% | 0.089% |
| 77 | 6.761 | 6.741 | 6.795 | VV | 501 | 8856 | 0.24% | 0.102% |
| 78 | 6.812 | 6.795 | 6.854 | VV | 477 | 9603 | 0.26% | 0.111% |
| 79 | 6.889 | 6.854 | 6.913 | VV | 724 | 11412 | 0.30% | 0.132% |
| 80 | 6.928 | 6.913 | 6.956 | VV | 160 | 2797 | 0.07% | 0.032% |
| 81 | 6.971 | 6.956 | 7.010 | VV | 169 | 4407 | 0.12% | 0.051% |
| 82 | 7.049 | 7.010 | 7.078 | VV | 1786 | 21400 | 0.57% | 0.247% |
| 83 | 7.107 | 7.078 | 7.144 | VV | 315 | 7470 | 0.20% | 0.086% |
| 84 | 7.156 | 7.144 | 7.170 | VV | 345 | 4255 | 0.11% | 0.049% |
| 85 | 7.191 | 7.170 | 7.236 | VV | 822 | 14551 | 0.39% | 0.168% |
| 86 | 7.252 | 7.236 | 7.266 | VV | 309 | 4172 | 0.11% | 0.048% |
| 87 | 7.281 | 7.266 | 7.320 | VV | 377 | 5749 | 0.15% | 0.066% |
| 88 | 7.331 | 7.320 | 7.377 | VV | 160 | 3250 | 0.09% | 0.038% |
| 89 | 7.401 | 7.377 | 7.421 | VV | 182 | 2477 | 0.07% | 0.029% |

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|---|---|---|---|---|---|---|---|---|
| 90 | 7.450 | 7.421 | 7.487 | VV | 657 | 9271 | 0.25% | 0.107% |
| 91 | 7.516 | 7.487 | 7.580 | VV | 192 | 6898 | 0.18% | 0.080% |
| 92 | 7.611 | 7.580 | 7.631 | VV | 310 | 5195 | 0.14% | 0.060% |
| 93 | 7.644 | 7.631 | 7.657 | VV | 256 | 2584 | 0.07% | 0.030% |
| 94 | 7.666 | 7.657 | 7.688 | VV | 197 | 2241 | 0.06% | 0.026% |
| 95 | 7.711 | 7.688 | 7.733 | VV | 143 | 3004 | 0.08% | 0.035% |
| 96 | 7.755 | 7.733 | 7.776 | VV | 570 | 7537 | 0.20% | 0.087% |
| 97 | 7.811 | 7.776 | 7.834 | VV | 935 | 12807 | 0.34% | 0.148% |
| 98 | 7.847 | 7.834 | 7.868 | VV | 220 | 3173 | 0.08% | 0.037% |
| 99 | 7.878 | 7.868 | 7.892 | VV | 184 | 1719 | 0.05% | 0.020% |
| 100 | 7.911 | 7.892 | 7.948 | VV | 187 | 3628 | 0.10% | 0.042% |
| 101 | 7.967 | 7.948 | 7.991 | PV | 474 | 6710 | 0.18% | 0.078% |
| 102 | 7.998 | 7.991 | 8.033 | VV | 237 | 4554 | 0.12% | 0.053% |
| 103 | 8.059 | 8.033 | 8.128 | VV | 2879 | 47119 | 1.25% | 0.545% |
| 104 | 8.150 | 8.128 | 8.188 | VV | 388 | 11017 | 0.29% | 0.127% |
| 105 | 8.206 | 8.188 | 8.226 | VV | 380 | 6007 | 0.16% | 0.069% |
| 106 | 8.251 | 8.226 | 8.271 | VV | 379 | 5801 | 0.15% | 0.067% |
| 107 | 8.290 | 8.271 | 8.324 | VV | 443 | 5810 | 0.15% | 0.067% |
| 108 | 8.335 | 8.324 | 8.354 | VV | 117 | 1588 | 0.04% | 0.018% |
| 109 | 8.402 | 8.354 | 8.454 | VV | 528 | 20529 | 0.55% | 0.237% |
| 110 | 8.461 | 8.454 | 8.495 | VV | 326 | 6843 | 0.18% | 0.079% |
| 111 | 8.515 | 8.495 | 8.532 | VV | 409 | 7255 | 0.19% | 0.084% |
| 112 | 8.546 | 8.532 | 8.557 | VV | 340 | 4630 | 0.12% | 0.054% |
| 113 | 8.568 | 8.557 | 8.581 | VV | 308 | 4389 | 0.12% | 0.051% |
| 114 | 8.599 | 8.581 | 8.637 | VV | 620 | 12919 | 0.34% | 0.149% |
| 115 | 8.657 | 8.637 | 8.688 | VV | 315 | 4574 | 0.12% | 0.053% |
| 116 | 8.709 | 8.688 | 8.737 | VV | 245 | 4478 | 0.12% | 0.052% |
| 117 | 8.777 | 8.737 | 8.796 | VV | 1473 | 20313 | 0.54% | 0.235% |
| 118 | 8.813 | 8.796 | 8.864 | VV | 655 | 18314 | 0.49% | 0.212% |
| 119 | 8.891 | 8.864 | 8.951 | VV | 1490 | 28460 | 0.76% | 0.329% |
| 120 | 8.964 | 8.951 | 8.988 | VV | 364 | 5349 | 0.14% | 0.062% |
| 121 | 9.011 | 8.988 | 9.029 | VV | 331 | 4464 | 0.12% | 0.052% |
| 122 | 9.052 | 9.029 | 9.079 | VV | 199 | 4381 | 0.12% | 0.051% |
| 123 | 9.117 | 9.079 | 9.131 | VV | 251 | 5142 | 0.14% | 0.059% |
| 124 | 9.135 | 9.131 | 9.146 | VV | 165 | 1290 | 0.03% | 0.015% |
| 125 | 9.176 | 9.146 | 9.218 | VV | 408 | 9308 | 0.25% | 0.108% |
| 126 | 9.242 | 9.218 | 9.279 | VV | 648 | 10650 | 0.28% | 0.123% |
| 127 | 9.299 | 9.279 | 9.345 | VV | 266 | 5558 | 0.15% | 0.064% |
| 128 | 9.385 | 9.345 | 9.418 | VV | 401 | 8112 | 0.22% | 0.094% |
| 129 | 9.434 | 9.418 | 9.475 | VV | 767 | 11569 | 0.31% | 0.134% |
| 130 | 9.486 | 9.475 | 9.514 | VV | 139 | 2758 | 0.07% | 0.032% |
| 131 | 9.521 | 9.514 | 9.547 | VV | 177 | 2206 | 0.06% | 0.026% |
| 132 | 9.576 | 9.547 | 9.623 | VV | 346 | 7420 | 0.20% | 0.086% |
| 133 | 9.656 | 9.623 | 9.711 | VV | 1277 | 22678 | 0.60% | 0.262% |
| 134 | 9.724 | 9.711 | 9.742 | VV | 301 | 4029 | 0.11% | 0.047% |
| 135 | 9.749 | 9.742 | 9.790 | VV | 241 | 4619 | 0.12% | 0.053% |
| 136 | 9.801 | 9.790 | 9.864 | VV | 156 | 4770 | 0.13% | 0.055% |
| 137 | 9.905 | 9.864 | 9.921 | VV | 150 | 3066 | 0.08% | 0.035% |
| 138 | 9.934 | 9.921 | 9.948 | VV | 205 | 2032 | 0.05% | 0.023% |
| 139 | 9.969 | 9.948 | 9.988 | VV | 241 | 3589 | 0.10% | 0.041% |
| 140 | 10.044 | 9.988 | 10.064 | VV | 397 | 11041 | 0.29% | 0.128% |
| 141 | 10.080 | 10.064 | 10.104 | VV | 280 | 5428 | 0.14% | 0.063% |

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| 142 | 10.134 | 10.104 | 10.149 | VV | 332 | 5990 | 0.16% | 0.069% |
| 143 | 10.161 | 10.149 | 10.194 | VV | 220 | 4140 | 0.11% | 0.048% |
| 144 | 10.221 | 10.194 | 10.230 | VV | 211 | 2972 | 0.08% | 0.034% |
| 145 | 10.255 | 10.230 | 10.303 | VV | 265 | 9861 | 0.26% | 0.114% |
| 146 | 10.337 | 10.303 | 10.372 | VV | 384 | 11852 | 0.32% | 0.137% |
| 147 | 10.397 | 10.372 | 10.431 | VV | 490 | 11539 | 0.31% | 0.133% |
| 148 | 10.441 | 10.431 | 10.457 | VV | 300 | 3842 | 0.10% | 0.044% |
| 149 | 10.471 | 10.457 | 10.488 | VV | 334 | 4788 | 0.13% | 0.055% |
| 150 | 10.517 | 10.488 | 10.552 | VV | 736 | 14468 | 0.39% | 0.167% |
| 151 | 10.564 | 10.552 | 10.593 | VV | 186 | 3666 | 0.10% | 0.042% |
| 152 | 10.604 | 10.593 | 10.629 | VV | 238 | 3466 | 0.09% | 0.040% |
| 153 | 10.638 | 10.629 | 10.668 | VV | 178 | 2581 | 0.07% | 0.030% |
| 154 | 10.712 | 10.668 | 10.736 | VV | 270 | 5711 | 0.15% | 0.066% |
| 155 | 10.772 | 10.736 | 10.795 | VV | 197 | 4755 | 0.13% | 0.055% |
| 156 | 10.813 | 10.795 | 10.871 | VV | 350 | 7362 | 0.20% | 0.085% |
| 157 | 10.897 | 10.871 | 10.981 | VV | 233 | 6021 | 0.16% | 0.070% |
| 158 | 10.988 | 10.981 | 10.996 | VV | 86 | 487 | 0.01% | 0.006% |
| 159 | 11.025 | 10.996 | 11.071 | VV | 1772 | 27655 | 0.74% | 0.320% |
| 160 | 11.095 | 11.071 | 11.153 | VV | 2223 | 36883 | 0.98% | 0.426% |
| 161 | 11.187 | 11.153 | 11.286 | VV | 598 | 15527 | 0.41% | 0.179% |
| 162 | 11.316 | 11.286 | 11.343 | PV | 134 | 2287 | 0.06% | 0.026% |
| 163 | 11.412 | 11.343 | 11.424 | VV | 198 | 6141 | 0.16% | 0.071% |
| 164 | 11.483 | 11.424 | 11.531 | VV | 333 | 12636 | 0.34% | 0.146% |
| 165 | 11.560 | 11.531 | 11.594 | VV | 337 | 8109 | 0.22% | 0.094% |
| 166 | 11.760 | 11.594 | 11.791 | VV | 602 | 24271 | 0.65% | 0.281% |
| 167 | 11.800 | 11.791 | 11.826 | VV | 247 | 4051 | 0.11% | 0.047% |
| 168 | 11.840 | 11.826 | 11.870 | VV | 243 | 4450 | 0.12% | 0.051% |
| 169 | 11.898 | 11.870 | 11.935 | VV | 311 | 7443 | 0.20% | 0.086% |
| 170 | 11.972 | 11.935 | 12.011 | VV | 518 | 13168 | 0.35% | 0.152% |
| 171 | 12.031 | 12.011 | 12.047 | VV | 304 | 4643 | 0.12% | 0.054% |
| 172 | 12.071 | 12.047 | 12.118 | VV | 330 | 7364 | 0.20% | 0.085% |
| 173 | 12.129 | 12.118 | 12.151 | VV | 184 | 2982 | 0.08% | 0.034% |
| 174 | 12.167 | 12.151 | 12.182 | VV | 199 | 3544 | 0.09% | 0.041% |
| 175 | 12.205 | 12.182 | 12.218 | VV | 300 | 5359 | 0.14% | 0.062% |
| 176 | 12.260 | 12.218 | 12.302 | VV | 952 | 17994 | 0.48% | 0.208% |
| 177 | 12.337 | 12.302 | 12.371 | VV | 980 | 14852 | 0.40% | 0.172% |
| 178 | 12.398 | 12.371 | 12.431 | VV | 2649 | 34594 | 0.92% | 0.400% |
| 179 | 12.460 | 12.431 | 12.475 | VV | 215 | 4165 | 0.11% | 0.048% |
| 180 | 12.485 | 12.475 | 12.498 | VV | 122 | 1508 | 0.04% | 0.017% |
| 181 | 12.514 | 12.498 | 12.558 | VV | 224 | 4428 | 0.12% | 0.051% |
| 182 | 12.567 | 12.558 | 12.578 | VV | 53 | 453 | 0.01% | 0.005% |
| 183 | 12.592 | 12.578 | 12.608 | VV | 108 | 911 | 0.02% | 0.011% |
| 184 | 12.615 | 12.608 | 12.623 | PV | 69 | 455 | 0.01% | 0.005% |
| 185 | 12.671 | 12.623 | 12.708 | VV | 268 | 7062 | 0.19% | 0.082% |
| 186 | 12.721 | 12.708 | 12.740 | VV | 216 | 2524 | 0.07% | 0.029% |
| 187 | 12.761 | 12.740 | 12.773 | VV | 221 | 3022 | 0.08% | 0.035% |
| 188 | 12.840 | 12.773 | 12.967 | VV | 295439 | 3756238 | 100.00% | 43.420% |
| 189 | 13.007 | 12.967 | 13.041 | VV | 857 | 29212 | 0.78% | 0.338% |
| 190 | 13.059 | 13.041 | 13.099 | VV | 580 | 16108 | 0.43% | 0.186% |
| 191 | 13.136 | 13.099 | 13.154 | VV | 416 | 12514 | 0.33% | 0.145% |
| 192 | 13.165 | 13.154 | 13.188 | VV | 401 | 7313 | 0.19% | 0.085% |
| 193 | 13.203 | 13.188 | 13.248 | VV | 474 | 14149 | 0.38% | 0.164% |
| 194 | 13.286 | 13.248 | 13.371 | VV | 579 | 31311 | 0.83% | 0.362% |

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| 195 | 13.384 | 13.371 | 13.410 | VV | 432 | 8401 | 0.22% | 0.097% |
| 196 | 13.437 | 13.410 | 13.488 | VV | 410 | 16185 | 0.43% | 0.187% |
| 197 | 13.542 | 13.488 | 13.564 | VV | 967 | 21876 | 0.58% | 0.253% |
| 198 | 13.595 | 13.564 | 13.701 | VV | 2219 | 50757 | 1.35% | 0.587% |
| 199 | 13.722 | 13.701 | 13.759 | VV | 336 | 9008 | 0.24% | 0.104% |
| 200 | 13.825 | 13.759 | 13.881 | VV | 380 | 20545 | 0.55% | 0.237% |
| 201 | 13.900 | 13.881 | 13.917 | VV | 347 | 6505 | 0.17% | 0.075% |
| 202 | 13.951 | 13.917 | 13.964 | VV | 356 | 8049 | 0.21% | 0.093% |
| 203 | 14.033 | 13.964 | 14.134 | VV | 870 | 42157 | 1.12% | 0.487% |
| 204 | 14.158 | 14.134 | 14.200 | VV | 531 | 15514 | 0.41% | 0.179% |
| 205 | 14.214 | 14.200 | 14.224 | VV | 348 | 4958 | 0.13% | 0.057% |
| 206 | 14.231 | 14.224 | 14.279 | VV | 423 | 10815 | 0.29% | 0.125% |
| 207 | 14.298 | 14.279 | 14.338 | VV | 380 | 11823 | 0.31% | 0.137% |
| 208 | 14.360 | 14.338 | 14.411 | VV | 353 | 12825 | 0.34% | 0.148% |
| 209 | 14.468 | 14.411 | 14.491 | VV | 367 | 15090 | 0.40% | 0.174% |
| 210 | 14.503 | 14.491 | 14.527 | VV | 359 | 6015 | 0.16% | 0.070% |
| 211 | 14.538 | 14.527 | 14.581 | VV | 257 | 6983 | 0.19% | 0.081% |
| 212 | 14.652 | 14.581 | 14.672 | VV | 739 | 18392 | 0.49% | 0.213% |
| 213 | 14.697 | 14.672 | 14.751 | VV | 1645 | 32845 | 0.87% | 0.380% |
| 214 | 14.759 | 14.751 | 14.850 | VV | 240 | 8684 | 0.23% | 0.100% |
| 215 | 14.865 | 14.850 | 14.898 | VV | 273 | 4901 | 0.13% | 0.057% |
| 216 | 14.910 | 14.898 | 14.923 | VV | 159 | 1520 | 0.04% | 0.018% |
| 217 | 14.941 | 14.923 | 14.952 | VV | 136 | 1712 | 0.05% | 0.020% |
| 218 | 14.966 | 14.952 | 14.988 | VV | 116 | 2032 | 0.05% | 0.023% |
| 219 | 14.998 | 14.988 | 15.030 | VV | 129 | 2212 | 0.06% | 0.026% |
| 220 | 15.040 | 15.030 | 15.062 | VV | 90 | 1481 | 0.04% | 0.017% |
| 221 | 15.127 | 15.062 | 15.163 | VV | 185 | 6149 | 0.16% | 0.071% |
| 222 | 15.219 | 15.163 | 15.304 | VV | 273 | 10102 | 0.27% | 0.117% |
| 223 | 15.332 | 15.304 | 15.341 | PV | 105 | 1713 | 0.05% | 0.020% |
| 224 | 15.353 | 15.341 | 15.384 | VV | 91 | 1914 | 0.05% | 0.022% |
| 225 | 15.398 | 15.384 | 15.442 | VV | 122 | 3652 | 0.10% | 0.042% |
| 226 | 15.450 | 15.442 | 15.501 | VV | 112 | 2613 | 0.07% | 0.030% |
| 227 | 15.514 | 15.501 | 15.611 | VV | 155 | 9046 | 0.24% | 0.105% |
| 228 | 15.620 | 15.611 | 15.641 | VV | 177 | 1651 | 0.04% | 0.019% |
| 229 | 15.716 | 15.641 | 15.854 | VV | 1301 | 35323 | 0.94% | 0.408% |
| 230 | 15.895 | 15.854 | 15.938 | VV | 277 | 4231 | 0.11% | 0.049% |
| 231 | 15.952 | 15.938 | 15.984 | VV | 111 | 1820 | 0.05% | 0.021% |
| 232 | 16.026 | 15.984 | 16.143 | VV | 169 | 9095 | 0.24% | 0.105% |
| 233 | 16.198 | 16.143 | 16.231 | PV | 334 | 9091 | 0.24% | 0.105% |
| 234 | 16.261 | 16.231 | 16.294 | VV | 201 | 5609 | 0.15% | 0.065% |
| 235 | 16.358 | 16.294 | 16.376 | VV | 178 | 6362 | 0.17% | 0.074% |
| 236 | 16.387 | 16.376 | 16.421 | VV | 205 | 3168 | 0.08% | 0.037% |
| 237 | 16.446 | 16.421 | 16.471 | VV | 124 | 2465 | 0.07% | 0.028% |
| 238 | 16.570 | 16.471 | 16.608 | VV | 150 | 7959 | 0.21% | 0.092% |
| 239 | 16.665 | 16.608 | 16.764 | VV | 1124 | 26782 | 0.71% | 0.310% |
| 240 | 16.778 | 16.764 | 16.798 | VV | 89 | 581 | 0.02% | 0.007% |
| 241 | 17.116 | 16.798 | 17.151 | PV | 414 | 9331 | 0.25% | 0.108% |
| 242 | 17.222 | 17.151 | 17.278 | VV | 130 | 3980 | 0.11% | 0.046% |
| 243 | 17.549 | 17.278 | 17.638 | PV | 1197 | 38919 | 1.04% | 0.450% |
| 244 | 17.830 | 17.638 | 17.884 | PV | 189 | 10358 | 0.28% | 0.120% |
| 245 | 17.973 | 17.884 | 18.051 | PV | 730 | 16770 | 0.45% | 0.194% |
| 246 | 18.162 | 18.051 | 18.175 | VV | 87 | 2958 | 0.08% | 0.034% |

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| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 247 | 18.382 | 18.175 | 18.448 | PV | 1127 | 31337 | 0.83% | 0.362% |
| 248 | 18.635 | 18.448 | 18.658 | VV | 181 | 8949 | 0.24% | 0.103% |
| 249 | 18.778 | 18.658 | 18.828 | PV | 590 | 13798 | 0.37% | 0.160% |
| 250 | 18.968 | 18.828 | 18.984 | VV | 174 | 10763 | 0.29% | 0.124% |
| 251 | 19.165 | 18.984 | 19.238 | VV | 1187 | 47851 | 1.27% | 0.553% |
| 252 | 19.458 | 19.238 | 19.512 | VV | 2177 | 150928 | 4.02% | 1.745% |
| 253 | 19.540 | 19.512 | 19.638 | VV | 1798 | 84947 | 2.26% | 0.982% |
| 254 | 19.904 | 19.638 | 19.937 | VV | 1888 | 179134 | 4.77% | 2.071% |
| 255 | 20.265 | 19.937 | 20.284 | VV | 1911 | 326559 | 8.69% | 3.775% |
| 256 | 20.617 | 20.284 | 20.651 | VV | 3315 | 519358 | 13.83% | 6.004% |
| 257 | 20.938 | 20.651 | 20.988 | VV | 2436 | 512445 | 13.64% | 5.924% |
| 258 | 21.024 | 20.988 | 21.044 | VV | 2268 | 76186 | 2.03% | 0.881% |
| 259 | 21.469 | 21.044 | 21.521 | VV | 2161 | 543053 | 14.46% | 6.277% |
| 260 | 21.539 | 21.521 | 21.586 | VV | 1571 | 57085 | 1.52% | 0.660% |
| 261 | 21.633 | 21.586 | 21.684 | VV | 1386 | 77526 | 2.06% | 0.896% |
| 262 | 21.736 | 21.684 | 21.791 | VV | 1178 | 72098 | 1.92% | 0.833% |
| 263 | 21.801 | 21.791 | 21.917 | VV | 987 | 60624 | 1.61% | 0.701% |
| 264 | 21.979 | 21.917 | 22.033 | VV | 617 | 35877 | 0.96% | 0.415% |
| 265 | 22.104 | 22.033 | 22.127 | VV | 233 | 17577 | 0.47% | 0.203% |
| 266 | 22.151 | 22.127 | 22.205 | VV | 174 | 5616 | 0.15% | 0.065% |
| | | | Sum of corrected areas: | | | 8650875 | | |

Aliphatic EPH 021125.M Fri Feb 28 01:15:22 2025

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Weston Solutions, Inc. | Date Collected: | 02/24/25 |
| Project: | RFP 905 | Date Received: | 02/24/25 |
| Client Sample ID: | P001-CLAY-CF01-02 | SDG No.: | Q1421 |
| Lab Sample ID: | Q1421-08 | Matrix: | Water |
| Analytical Method: | NJEPH | % Solid: | 0 |
| Sample Wt/Vol: | 1000 Units: mL | Final Vol: | 2000 uL |
| Soil Aliquot Vol: | uL | Test: | EPH |
| Prep Method : | SW3510 | | |

| File ID : | Dilution: | Prep Date : | Date Analyzed : | Prep Batch ID |
|---|---|---|---|---|
| FD049123.D | 1 | 02/26/25 | 02/27/25 | PB166883 |

| CAS Number | Parameter | | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | |
| Aromatic C10-C12 | Aromatic C10-C12 | | 10.5 | J | 3.32 | 20.0 | ug/l |
| Aromatic C12-C16 | Aromatic C12-C16 | | 14.4 | J | 3.69 | 30.0 | ug/l |
| Aromatic C16-C21 | Aromatic C16-C21 | | 48.3 | J | 12.7 | 50.0 | ug/l |
| Aromatic C21-C36 | Aromatic C21-C36 | | 92.7 | | 25.2 | 80.0 | ug/l |
| **SURROGATES** | | | | | | | |
| 580-13-2 | 2-Bromonaphthalene (SURR) | | 53.9 | | 40 - 140 | 108% | SPK: 50 |
| 321-60-8 | 2-Flurobiphenyl (SURR) | | 56.1 | | 40 - 140 | 112% | SPK: 50 |
| 84-15-1 | ortho-Terphenyl (SURR) | | 48.3 | | 40 - 140 | 97% | SPK: 50 |

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

# Quantitation Report For Aromatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | Q1421-08 | Acq On: | 27 Feb 2025 15:17 |
| Client Sample ID: | P001-CLAY-CF01-02 | Operator: | YP/AJ |
| Data file: | FD049123.D | Misc: | |
| Instrument: | FID_D | ALS Vial: | 67 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aromatic C10-C12 | 4.076 | 5.794 | 836382 | 5.26 | 200 | ug/ml |
| Aromatic C12-C16 | 5.795 | 8.397 | 1159488 | 7.205 | 300 | ug/ml |
| Aromatic C16-C21 | 8.398 | 12.661 | 3699941 | 24.126 | 500 | ug/ml |
| Aromatic C21-C36 | 12.662 | 18.071 | 6631344 | 46.336 | 800 | ug/ml |
| Aromatic EPH | 4.076 | 18.071 | 12327155 | 82.926 | | ug/ml |
| 2-Bromonaphthalene (SURR) | 7.352 | 7.352 | 7707992 | 53.86 | | ug/ml |
| 2-Flurobiphenyl (SURR) | 8.202 | 8.202 | 4931798 | 56.1 | | ug/ml |
| ortho-Terphenyl (SURR) | 11.237 | 11.237 | 7809827 | 48.28 | | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022725AR\
Data File : FD049123.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2025 15:17
Operator : YP/AJ
Sample : Q1421-08
Misc :
ALS Vial : 67 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF01-02

Integration File: autoint1.e
Quant Time: Feb 28 01:28:25 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

| Compound | R.T. | Response | Conc Units |
|---|---|---|---|
| **System Monitoring Compounds** | | | |
| 4) S 2-Bromonaphthalene (S... | 7.352 | 7707992 | 53.861 ug/ml |
| Spiked Amount 50.000 | | Recovery = 107.72% | |
| 6) S 2-Flurobiphenyl (SURR) | 8.202 | 4931798 | 56.099 ug/ml |
| Spiked Amount 50.000 Range 0 - 131 | | Recovery = 112.20% | |
| 11) S ortho-Terphenyl (SURR) | 11.237 | 7809827 | 48.276 ug/ml |
| Spiked Amount 50.000 | | Recovery = 96.55% | |
| **Target Compounds** | | | |

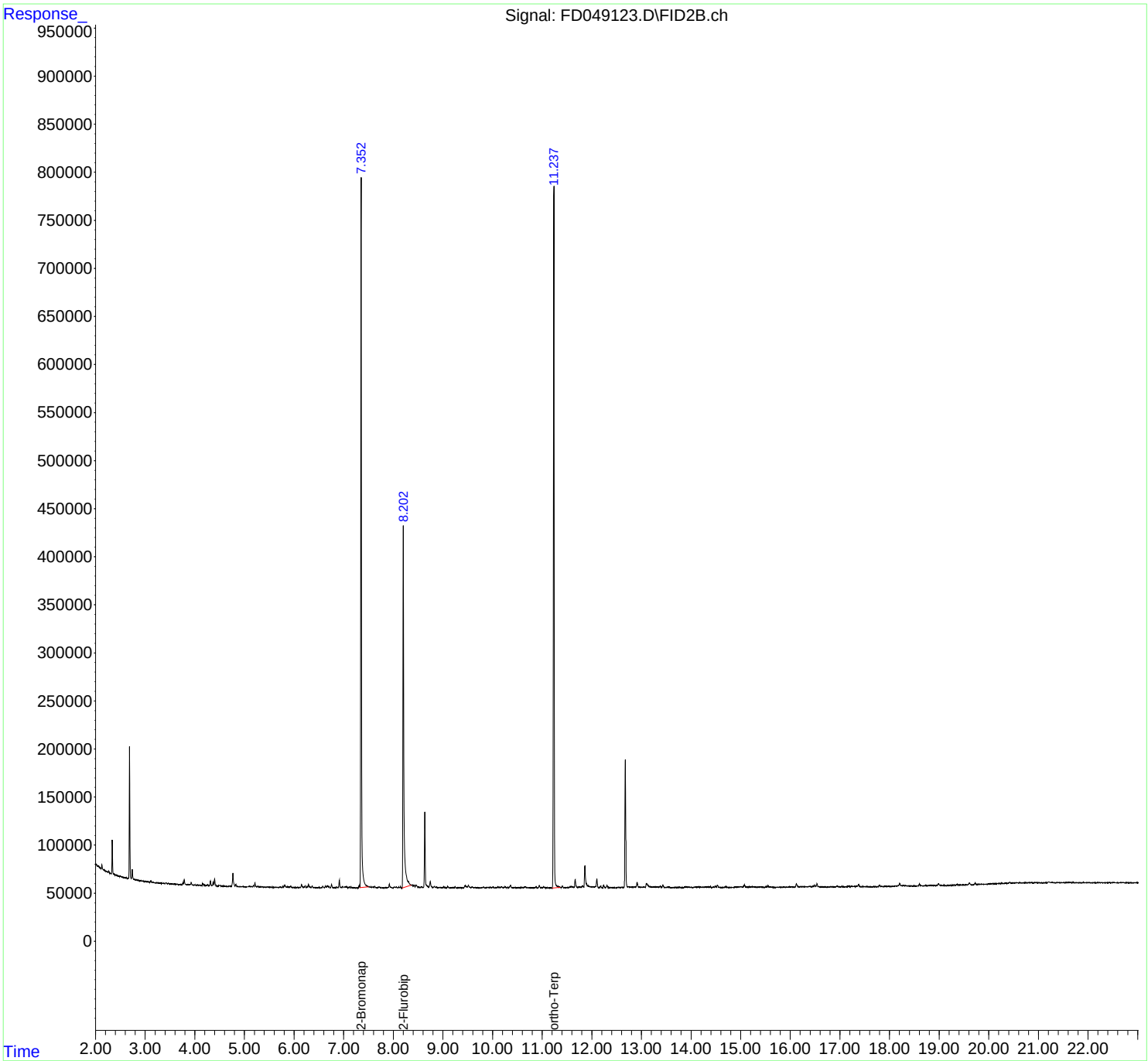
(f)=RT Delta > 1/2 Window (m)=manual int.

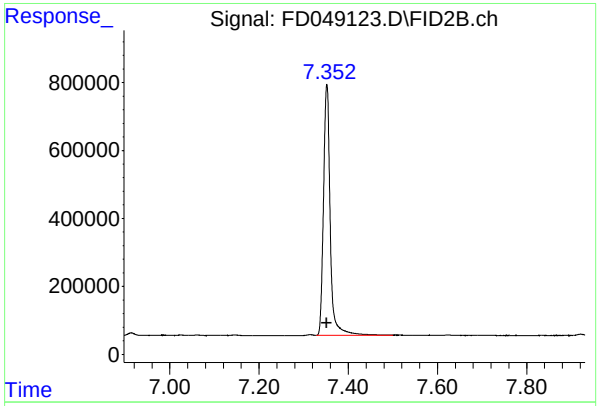
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022725AR\
Data File : FD049123.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2025 15:17
Operator : YP/AJ
Sample : Q1421-08
Misc :
ALS Vial : 67 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF01-02

Integration File: autoint1.e
Quant Time: Feb 28 01:28:25 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

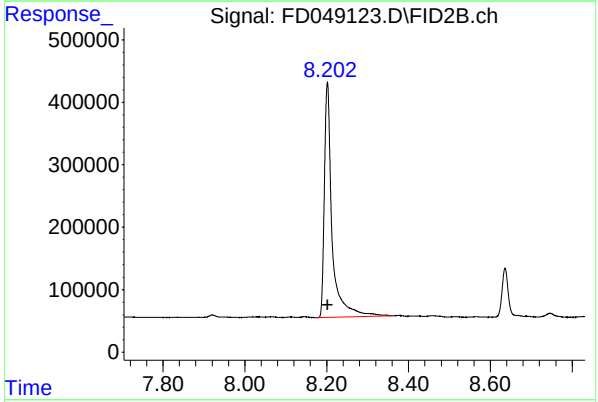





#4 2-Bromonaphthalene (SURR)

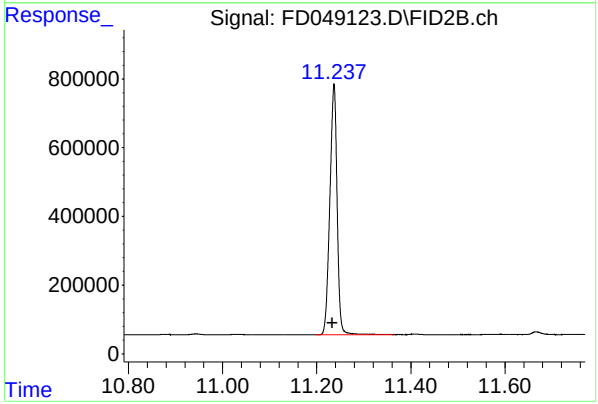
R.T.: 7.352 min
Delta R.T.: 0.000 min
Response: 7707992
Conc: 53.86 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF01-02




#6 2-Flurobiphenyl (SURR)

R.T.: 8.202 min
Delta R.T.: 0.000 min
Response: 4931798
Conc: 56.10 ug/ml




#11 ortho-Terphenyl (SURR)

R.T.: 11.237 min
Delta R.T.: 0.004 min
Response: 7809827
Conc: 48.28 ug/ml

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Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022725AR\
Data File : FD049123.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2025 15:17
Sample : Q1421-08
Misc :
ALS Vial : 67 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Title : GC Extractables

Signal : FID2B.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 4.059 | 4.042 | 4.092 | PH | 836 | 18891 | 0.24% | 0.056% |
| 2 | 4.094 | 4.092 | 4.098 | VV | 563 | 1948 | 0.02% | 0.006% |
| 3 | 4.105 | 4.098 | 4.120 | VV | 740 | 7165 | 0.09% | 0.021% |
| 4 | 4.132 | 4.120 | 4.140 | VV | 532 | 5717 | 0.07% | 0.017% |
| 5 | 4.160 | 4.140 | 4.238 | VV | 2658 | 58527 | 0.75% | 0.175% |
| 6 | 4.261 | 4.238 | 4.289 | VV | 1311 | 23659 | 0.30% | 0.071% |
| 7 | 4.315 | 4.289 | 4.349 | VV | 5422 | 66372 | 0.85% | 0.198% |
| 8 | 4.370 | 4.349 | 4.383 | VV | 4507 | 48323 | 0.62% | 0.144% |
| 9 | 4.399 | 4.383 | 4.452 | VV | 7687 | 95115 | 1.22% | 0.284% |
| 10 | 4.456 | 4.452 | 4.462 | VV | 391 | 2343 | 0.03% | 0.007% |
| 11 | 4.487 | 4.462 | 4.496 | VV | 828 | 11863 | 0.15% | 0.035% |
| 12 | 4.511 | 4.496 | 4.531 | VV | 1049 | 15750 | 0.20% | 0.047% |
| 13 | 4.537 | 4.531 | 4.551 | VV | 502 | 4489 | 0.06% | 0.013% |
| 14 | 4.556 | 4.551 | 4.567 | VV | 333 | 2126 | 0.03% | 0.006% |
| 15 | 4.582 | 4.567 | 4.620 | VV | 579 | 10893 | 0.14% | 0.033% |
| 16 | 4.627 | 4.620 | 4.634 | VV | 236 | 1087 | 0.01% | 0.003% |
| 17 | 4.661 | 4.644 | 4.671 | VV | 293 | 2745 | 0.04% | 0.008% |
| 18 | 4.690 | 4.671 | 4.720 | VV | 824 | 11787 | 0.15% | 0.035% |
| 19 | 4.768 | 4.720 | 4.810 | VV | 14070 | 200668 | 2.57% | 0.599% |
| 20 | 4.827 | 4.810 | 4.868 | VV | 2850 | 36387 | 0.47% | 0.109% |
| 21 | 4.885 | 4.879 | 4.897 | VV | 224 | 1424 | 0.02% | 0.004% |
| 22 | 4.907 | 4.897 | 4.915 | VV | 292 | 1683 | 0.02% | 0.005% |
| 23 | 4.965 | 4.915 | 5.024 | PV | 587 | 15915 | 0.20% | 0.048% |
| 24 | 5.044 | 5.024 | 5.072 | VV | 265 | 5456 | 0.07% | 0.016% |
| 25 | 5.103 | 5.072 | 5.125 | VV | 732 | 19616 | 0.25% | 0.059% |
| 26 | 5.131 | 5.125 | 5.162 | VV | 797 | 13882 | 0.18% | 0.041% |
| 27 | 5.183 | 5.162 | 5.196 | VV | 1827 | 23389 | 0.30% | 0.070% |
| 28 | 5.212 | 5.196 | 5.247 | VV | 4294 | 53464 | 0.68% | 0.160% |
| 29 | 5.271 | 5.247 | 5.322 | VV | 1245 | 26063 | 0.33% | 0.078% |
| 30 | 5.336 | 5.322 | 5.369 | VV | 621 | 12075 | 0.15% | 0.036% |
| 31 | 5.372 | 5.369 | 5.389 | VV | 385 | 2562 | 0.03% | 0.008% |
| 32 | 5.413 | 5.403 | 5.419 | VV | 337 | 2066 | 0.03% | 0.006% |
| 33 | 5.430 | 5.419 | 5.445 | VV | 253 | 3430 | 0.04% | 0.010% |
| 34 | 5.449 | 5.445 | 5.453 | VV | 290 | 1175 | 0.02% | 0.004% |
| 35 | 5.466 | 5.453 | 5.510 | VV | 563 | 10635 | 0.14% | 0.032% |
| 36 | 5.515 | 5.510 | 5.520 | PV | 268 | 1172 | 0.01% | 0.003% |

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|---|---|---|---|---|---|---|---|---|
| 37 | 5.525 | 5.520 | 5.538 | VV | 357 | 1892 | 0.02% | 0.006% |
| 38 | 5.567 | 5.561 | 5.572 | VV | 195 | 1022 | 0.01% | 0.003% |
| 39 | 5.591 | 5.583 | 5.599 | VV | 214 | 1405 | 0.02% | 0.004% |
| 40 | 5.607 | 5.599 | 5.614 | PV | 302 | 1413 | 0.02% | 0.004% |
| 41 | 5.634 | 5.614 | 5.653 | VV | 277 | 3304 | 0.04% | 0.010% |
| 42 | 5.661 | 5.653 | 5.698 | VV | 232 | 3955 | 0.05% | 0.012% |
| 43 | 5.733 | 5.698 | 5.751 | VV | 463 | 8575 | 0.11% | 0.026% |
| 44 | 5.770 | 5.751 | 5.792 | VV | 1093 | 13845 | 0.18% | 0.041% |
| 45 | 5.812 | 5.792 | 5.841 | VV | 2859 | 41506 | 0.53% | 0.124% |
| 46 | 5.845 | 5.841 | 5.852 | VV | 648 | 4036 | 0.05% | 0.012% |
| 47 | 5.871 | 5.852 | 5.905 | VV | 1057 | 19929 | 0.25% | 0.060% |
| 48 | 5.935 | 5.905 | 5.973 | VV | 1342 | 26289 | 0.34% | 0.079% |
| 49 | 5.982 | 5.973 | 6.003 | VV | 392 | 3976 | 0.05% | 0.012% |
| 50 | 6.011 | 6.003 | 6.027 | VV | 347 | 2760 | 0.04% | 0.008% |
| 51 | 6.033 | 6.027 | 6.052 | PV | 301 | 2471 | 0.03% | 0.007% |
| 52 | 6.065 | 6.052 | 6.102 | VV | 352 | 3926 | 0.05% | 0.012% |
| 53 | 6.111 | 6.102 | 6.122 | PV | 272 | 1573 | 0.02% | 0.005% |
| 54 | 6.152 | 6.122 | 6.199 | VV | 3544 | 56339 | 0.72% | 0.168% |
| 55 | 6.223 | 6.199 | 6.242 | VV | 2270 | 25291 | 0.32% | 0.076% |
| 56 | 6.263 | 6.242 | 6.275 | VV | 1274 | 15436 | 0.20% | 0.046% |
| 57 | 6.293 | 6.275 | 6.314 | VV | 3431 | 42875 | 0.55% | 0.128% |
| 58 | 6.319 | 6.314 | 6.345 | VV | 963 | 12713 | 0.16% | 0.038% |
| 59 | 6.366 | 6.345 | 6.400 | VV | 2021 | 26527 | 0.34% | 0.079% |
| 60 | 6.408 | 6.400 | 6.420 | VV | 302 | 2305 | 0.03% | 0.007% |
| 61 | 6.427 | 6.420 | 6.445 | VV | 331 | 2109 | 0.03% | 0.006% |
| 62 | 6.452 | 6.445 | 6.463 | VV | 190 | 1546 | 0.02% | 0.005% |
| 63 | 6.467 | 6.463 | 6.479 | VV | 254 | 1400 | 0.02% | 0.004% |
| 64 | 6.507 | 6.479 | 6.533 | VV | 454 | 6204 | 0.08% | 0.019% |
| 65 | 6.555 | 6.533 | 6.564 | VV | 307 | 2624 | 0.03% | 0.008% |
| 66 | 6.579 | 6.564 | 6.615 | VV | 1944 | 26230 | 0.34% | 0.078% |
| 67 | 6.633 | 6.615 | 6.650 | VV | 1771 | 26860 | 0.34% | 0.080% |
| 68 | 6.679 | 6.650 | 6.691 | VV | 2334 | 41258 | 0.53% | 0.123% |
| 69 | 6.703 | 6.691 | 6.730 | VV | 1735 | 22605 | 0.29% | 0.067% |
| 70 | 6.757 | 6.730 | 6.781 | VV | 3650 | 47023 | 0.60% | 0.140% |
| 71 | 6.785 | 6.781 | 6.809 | VV | 332 | 3681 | 0.05% | 0.011% |
| 72 | 6.817 | 6.809 | 6.822 | VV | 286 | 1613 | 0.02% | 0.005% |
| 73 | 6.857 | 6.822 | 6.892 | VV | 947 | 20873 | 0.27% | 0.062% |
| 74 | 6.914 | 6.892 | 6.945 | VV | 8050 | 94097 | 1.20% | 0.281% |
| 75 | 6.985 | 6.945 | 7.008 | VV | 1382 | 32247 | 0.41% | 0.096% |
| 76 | 7.025 | 7.008 | 7.039 | VV | 1520 | 19784 | 0.25% | 0.059% |
| 77 | 7.062 | 7.039 | 7.079 | VV | 1740 | 27601 | 0.35% | 0.082% |
| 78 | 7.115 | 7.079 | 7.131 | VV | 1276 | 24775 | 0.32% | 0.074% |
| 79 | 7.146 | 7.131 | 7.189 | VV | 1772 | 24293 | 0.31% | 0.073% |
| 80 | 7.206 | 7.189 | 7.221 | VV | 440 | 5489 | 0.07% | 0.016% |
| 81 | 7.227 | 7.221 | 7.237 | VV | 225 | 1530 | 0.02% | 0.005% |
| 82 | 7.248 | 7.237 | 7.252 | VV | 273 | 1717 | 0.02% | 0.005% |
| 83 | 7.262 | 7.252 | 7.285 | VV | 385 | 4307 | 0.06% | 0.013% |
| 84 | 7.315 | 7.285 | 7.328 | PV | 2632 | 30096 | 0.38% | 0.090% |
| 85 | 7.352 | 7.328 | 7.504 | VV | 739963 | 7817703 | 100.00% | 23.344% |
| 86 | 7.507 | 7.504 | 7.511 | VV | 1549 | 6335 | 0.08% | 0.019% |
| 87 | 7.517 | 7.511 | 7.564 | VV | 1662 | 37799 | 0.48% | 0.113% |
| 88 | 7.582 | 7.564 | 7.607 | VV | 1397 | 25529 | 0.33% | 0.076% |
| 89 | 7.623 | 7.607 | 7.645 | VV | 2107 | 27887 | 0.36% | 0.083% |

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|---|---|---|---|---|---|---|---|---|
| 90 | 7.650 | 7.645 | 7.667 | VV | 691 | 7838 | 0.10% | 0.023% |
| 91 | 7.682 | 7.667 | 7.695 | VV | 764 | 11005 | 0.14% | 0.033% |
| 92 | 7.711 | 7.695 | 7.737 | VV | 926 | 18761 | 0.24% | 0.056% |
| 93 | 7.742 | 7.737 | 7.747 | VV | 551 | 2732 | 0.03% | 0.008% |
| 94 | 7.758 | 7.747 | 7.771 | VV | 566 | 6074 | 0.08% | 0.018% |
| 95 | 7.777 | 7.771 | 7.801 | VV | 524 | 6834 | 0.09% | 0.020% |
| 96 | 7.805 | 7.801 | 7.809 | VV | 351 | 1490 | 0.02% | 0.004% |
| 97 | 7.812 | 7.809 | 7.816 | VV | 338 | 1206 | 0.02% | 0.004% |
| 98 | 7.819 | 7.816 | 7.824 | VV | 281 | 1406 | 0.02% | 0.004% |
| 99 | 7.836 | 7.824 | 7.849 | VV | 666 | 7928 | 0.10% | 0.024% |
| 100 | 7.870 | 7.849 | 7.879 | VV | 635 | 9202 | 0.12% | 0.027% |
| 101 | 7.887 | 7.879 | 7.901 | VV | 663 | 7837 | 0.10% | 0.023% |
| 102 | 7.921 | 7.901 | 7.992 | VV | 4299 | 71955 | 0.92% | 0.215% |
| 103 | 8.018 | 7.992 | 8.025 | VV | 1169 | 15997 | 0.20% | 0.048% |
| 104 | 8.031 | 8.025 | 8.051 | VV | 1198 | 15706 | 0.20% | 0.047% |
| 105 | 8.066 | 8.051 | 8.092 | VV | 1355 | 20116 | 0.26% | 0.060% |
| 106 | 8.113 | 8.092 | 8.128 | VV | 1217 | 14472 | 0.19% | 0.043% |
| 107 | 8.147 | 8.128 | 8.174 | VV | 1362 | 18608 | 0.24% | 0.056% |
| 108 | 8.202 | 8.174 | 8.361 | VV | 377232 | 5105520 | 65.31% | 15.246% |
| 109 | 8.376 | 8.361 | 8.397 | VV | 3472 | 64857 | 0.83% | 0.194% |
| 110 | 8.410 | 8.397 | 8.440 | VV | 2520 | 60530 | 0.77% | 0.181% |
| 111 | 8.460 | 8.440 | 8.499 | VV | 3238 | 76265 | 0.98% | 0.228% |
| 112 | 8.516 | 8.499 | 8.544 | VV | 1607 | 29617 | 0.38% | 0.088% |
| 113 | 8.567 | 8.544 | 8.597 | VV | 1441 | 32980 | 0.42% | 0.098% |
| 114 | 8.599 | 8.597 | 8.604 | VV | 771 | 3207 | 0.04% | 0.010% |
| 115 | 8.636 | 8.604 | 8.685 | VV | 79559 | 874017 | 11.18% | 2.610% |
| 116 | 8.690 | 8.685 | 8.715 | VV | 2234 | 29647 | 0.38% | 0.089% |
| 117 | 8.746 | 8.715 | 8.806 | VV | 7025 | 135017 | 1.73% | 0.403% |
| 118 | 8.827 | 8.806 | 8.854 | VV | 1768 | 34148 | 0.44% | 0.102% |
| 119 | 8.869 | 8.854 | 8.894 | VV | 1292 | 22112 | 0.28% | 0.066% |
| 120 | 8.900 | 8.894 | 8.906 | VV | 489 | 3215 | 0.04% | 0.010% |
| 121 | 8.945 | 8.906 | 8.984 | VV | 844 | 29302 | 0.37% | 0.087% |
| 122 | 9.020 | 8.984 | 9.034 | VV | 1183 | 23775 | 0.30% | 0.071% |
| 123 | 9.041 | 9.034 | 9.069 | VV | 1040 | 13514 | 0.17% | 0.040% |
| 124 | 9.095 | 9.069 | 9.129 | VV | 1910 | 31470 | 0.40% | 0.094% |
| 125 | 9.133 | 9.129 | 9.143 | VV | 473 | 3057 | 0.04% | 0.009% |
| 126 | 9.148 | 9.143 | 9.154 | VV | 341 | 1917 | 0.02% | 0.006% |
| 127 | 9.202 | 9.154 | 9.224 | VV | 701 | 19763 | 0.25% | 0.059% |
| 128 | 9.244 | 9.224 | 9.289 | VV | 1268 | 21042 | 0.27% | 0.063% |
| 129 | 9.303 | 9.289 | 9.320 | VV | 695 | 9237 | 0.12% | 0.028% |
| 130 | 9.321 | 9.320 | 9.326 | VV | 574 | 1335 | 0.02% | 0.004% |
| 131 | 9.330 | 9.326 | 9.337 | VV | 595 | 2878 | 0.04% | 0.009% |
| 132 | 9.343 | 9.337 | 9.377 | VV | 582 | 9893 | 0.13% | 0.030% |
| 133 | 9.389 | 9.377 | 9.410 | VV | 617 | 8125 | 0.10% | 0.024% |
| 134 | 9.443 | 9.410 | 9.495 | VV | 2574 | 75133 | 0.96% | 0.224% |
| 135 | 9.514 | 9.495 | 9.555 | VV | 3124 | 57601 | 0.74% | 0.172% |
| 136 | 9.560 | 9.555 | 9.567 | VV | 781 | 5240 | 0.07% | 0.016% |
| 137 | 9.587 | 9.567 | 9.637 | VV | 1180 | 35971 | 0.46% | 0.107% |
| 138 | 9.648 | 9.637 | 9.669 | VV | 801 | 11650 | 0.15% | 0.035% |
| 139 | 9.678 | 9.669 | 9.701 | VV | 564 | 8199 | 0.10% | 0.024% |
| 140 | 9.724 | 9.701 | 9.730 | VV | 319 | 3417 | 0.04% | 0.010% |
| 141 | 9.759 | 9.730 | 9.768 | VV | 439 | 7425 | 0.09% | 0.022% |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 142 | 9.784 | 9.768 | 9.798 | VV | 678 | 9546 | 0.12% | 0.029% |
| 143 | 9.823 | 9.798 | 9.849 | VV | 1197 | 20283 | 0.26% | 0.061% |
| 144 | 9.856 | 9.849 | 9.862 | VV | 431 | 2861 | 0.04% | 0.009% |
| 145 | 9.904 | 9.862 | 9.920 | VV | 930 | 22578 | 0.29% | 0.067% |
| 146 | 9.936 | 9.920 | 9.958 | VV | 861 | 15707 | 0.20% | 0.047% |
| 147 | 9.974 | 9.958 | 9.999 | VV | 793 | 16138 | 0.21% | 0.048% |
| 148 | 10.012 | 9.999 | 10.037 | VV | 1616 | 19453 | 0.25% | 0.058% |
| 149 | 10.043 | 10.037 | 10.059 | VV | 432 | 5131 | 0.07% | 0.015% |
| 150 | 10.064 | 10.059 | 10.074 | VV | 488 | 3707 | 0.05% | 0.011% |
| 151 | 10.102 | 10.074 | 10.119 | VV | 1085 | 20075 | 0.26% | 0.060% |
| 152 | 10.141 | 10.119 | 10.159 | VV | 1068 | 17690 | 0.23% | 0.053% |
| 153 | 10.186 | 10.159 | 10.205 | VV | 1636 | 30741 | 0.39% | 0.092% |
| 154 | 10.216 | 10.205 | 10.229 | VV | 857 | 10408 | 0.13% | 0.031% |
| 155 | 10.255 | 10.229 | 10.277 | VV | 1649 | 30553 | 0.39% | 0.091% |
| 156 | 10.292 | 10.277 | 10.311 | VV | 1050 | 14198 | 0.18% | 0.042% |
| 157 | 10.322 | 10.311 | 10.340 | VV | 924 | 13065 | 0.17% | 0.039% |
| 158 | 10.365 | 10.340 | 10.395 | VV | 3224 | 51321 | 0.66% | 0.153% |
| 159 | 10.410 | 10.395 | 10.419 | VV | 667 | 7886 | 0.10% | 0.024% |
| 160 | 10.422 | 10.419 | 10.427 | VV | 519 | 2378 | 0.03% | 0.007% |
| 161 | 10.452 | 10.427 | 10.459 | VV | 723 | 11316 | 0.14% | 0.034% |
| 162 | 10.461 | 10.459 | 10.480 | VV | 786 | 6763 | 0.09% | 0.020% |
| 163 | 10.492 | 10.480 | 10.509 | VV | 632 | 7667 | 0.10% | 0.023% |
| 164 | 10.524 | 10.509 | 10.532 | VV | 573 | 6356 | 0.08% | 0.019% |
| 165 | 10.547 | 10.532 | 10.554 | VV | 551 | 5648 | 0.07% | 0.017% |
| 166 | 10.570 | 10.554 | 10.592 | VV | 741 | 11669 | 0.15% | 0.035% |
| 167 | 10.601 | 10.592 | 10.620 | VV | 661 | 8935 | 0.11% | 0.027% |
| 168 | 10.661 | 10.620 | 10.685 | VV | 1816 | 40020 | 0.51% | 0.120% |
| 169 | 10.699 | 10.685 | 10.737 | VV | 844 | 16322 | 0.21% | 0.049% |
| 170 | 10.750 | 10.737 | 10.795 | VV | 628 | 11064 | 0.14% | 0.033% |
| 171 | 10.799 | 10.795 | 10.804 | VV | 237 | 1128 | 0.01% | 0.003% |
| 172 | 10.821 | 10.804 | 10.842 | VV | 406 | 6598 | 0.08% | 0.020% |
| 173 | 10.849 | 10.842 | 10.854 | VV | 517 | 2800 | 0.04% | 0.008% |
| 174 | 10.878 | 10.854 | 10.905 | VV | 1652 | 24363 | 0.31% | 0.073% |
| 175 | 10.943 | 10.905 | 10.980 | VV | 2849 | 46801 | 0.60% | 0.140% |
| 176 | 10.984 | 10.980 | 10.990 | VV | 590 | 3040 | 0.04% | 0.009% |
| 177 | 10.994 | 10.990 | 11.008 | VV | 683 | 6203 | 0.08% | 0.019% |
| 178 | 11.031 | 11.008 | 11.117 | VV | 1472 | 40996 | 0.52% | 0.122% |
| 179 | 11.123 | 11.117 | 11.141 | VV | 341 | 3738 | 0.05% | 0.011% |
| 180 | 11.148 | 11.141 | 11.189 | VV | 393 | 7112 | 0.09% | 0.021% |
| 181 | 11.197 | 11.189 | 11.203 | PV | 226 | 1207 | 0.02% | 0.004% |
| 182 | 11.237 | 11.203 | 11.311 | PV | 729928 | 7814611 | 99.96% | 23.335% |
| 183 | 11.319 | 11.311 | 11.344 | VV | 1870 | 30200 | 0.39% | 0.090% |
| 184 | 11.351 | 11.344 | 11.363 | VV | 1101 | 11151 | 0.14% | 0.033% |
| 185 | 11.369 | 11.363 | 11.387 | VV | 912 | 12148 | 0.16% | 0.036% |
| 186 | 11.409 | 11.387 | 11.436 | VV | 2464 | 40611 | 0.52% | 0.121% |
| 187 | 11.456 | 11.436 | 11.482 | VV | 694 | 15778 | 0.20% | 0.047% |
| 188 | 11.520 | 11.482 | 11.536 | VV | 905 | 22752 | 0.29% | 0.068% |
| 189 | 11.570 | 11.536 | 11.579 | VV | 1593 | 28569 | 0.37% | 0.085% |
| 190 | 11.591 | 11.579 | 11.620 | VV | 1790 | 34211 | 0.44% | 0.102% |
| 191 | 11.625 | 11.620 | 11.637 | VV | 1136 | 10233 | 0.13% | 0.031% |
| 192 | 11.666 | 11.637 | 11.715 | VV | 9011 | 149932 | 1.92% | 0.448% |
| 193 | 11.739 | 11.715 | 11.749 | VV | 1395 | 22493 | 0.29% | 0.067% |
| 194 | 11.756 | 11.749 | 11.784 | VV | 1398 | 22577 | 0.29% | 0.067% |

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|---|---|---|---|---|---|---|---|---|
| 195 | 11.816 | 11.784 | 11.842 | VV | 2605 | 59034 | 0.76% | 0.176% |
| 196 | 11.862 | 11.842 | 11.962 | VV | 23422 | 444864 | 5.69% | 1.328% |
| 197 | 11.970 | 11.962 | 12.002 | VV | 1740 | 37970 | 0.49% | 0.113% |
| 198 | 12.025 | 12.002 | 12.040 | VV | 1544 | 32082 | 0.41% | 0.096% |
| 199 | 12.046 | 12.040 | 12.054 | VV | 1310 | 10127 | 0.13% | 0.030% |
| 200 | 12.104 | 12.054 | 12.132 | VV | 9813 | 162911 | 2.08% | 0.486% |
| 201 | 12.179 | 12.132 | 12.214 | VV | 2430 | 53902 | 0.69% | 0.161% |
| 202 | 12.241 | 12.214 | 12.264 | VV | 3459 | 51691 | 0.66% | 0.154% |
| 203 | 12.269 | 12.264 | 12.279 | VV | 817 | 6750 | 0.09% | 0.020% |
| 204 | 12.306 | 12.279 | 12.340 | VV | 2644 | 53025 | 0.68% | 0.158% |
| 205 | 12.348 | 12.340 | 12.355 | VV | 672 | 5662 | 0.07% | 0.017% |
| 206 | 12.360 | 12.355 | 12.367 | VV | 713 | 4623 | 0.06% | 0.014% |
| 207 | 12.373 | 12.367 | 12.404 | VV | 676 | 14193 | 0.18% | 0.042% |
| 208 | 12.408 | 12.404 | 12.423 | VV | 654 | 6538 | 0.08% | 0.020% |
| 209 | 12.426 | 12.423 | 12.434 | VV | 530 | 3232 | 0.04% | 0.010% |
| 210 | 12.446 | 12.434 | 12.457 | VV | 593 | 7555 | 0.10% | 0.023% |
| 211 | 12.493 | 12.457 | 12.498 | VV | 727 | 12873 | 0.16% | 0.038% |
| 212 | 12.520 | 12.498 | 12.525 | VV | 876 | 12001 | 0.15% | 0.036% |
| 213 | 12.531 | 12.525 | 12.549 | VV | 782 | 10368 | 0.13% | 0.031% |
| 214 | 12.559 | 12.549 | 12.579 | VV | 803 | 12922 | 0.17% | 0.039% |
| 215 | 12.599 | 12.579 | 12.605 | VV | 985 | 12221 | 0.16% | 0.036% |
| 216 | 12.611 | 12.605 | 12.625 | VV | 1012 | 10476 | 0.13% | 0.031% |
| 217 | 12.636 | 12.625 | 12.645 | VV | 938 | 10102 | 0.13% | 0.030% |
| 218 | 12.677 | 12.645 | 12.723 | VV | 133761 | 1599174 | 20.46% | 4.775% |
| 219 | 12.737 | 12.723 | 12.780 | VV | 1731 | 44823 | 0.57% | 0.134% |
| 220 | 12.784 | 12.780 | 12.792 | VV | 1063 | 7184 | 0.09% | 0.021% |
| 221 | 12.804 | 12.792 | 12.821 | VV | 1095 | 18066 | 0.23% | 0.054% |
| 222 | 12.855 | 12.821 | 12.886 | VV | 1509 | 49427 | 0.63% | 0.148% |
| 223 | 12.914 | 12.886 | 12.952 | VV | 6036 | 110149 | 1.41% | 0.329% |
| 224 | 12.958 | 12.952 | 12.978 | VV | 1237 | 17673 | 0.23% | 0.053% |
| 225 | 12.989 | 12.978 | 13.020 | VV | 1215 | 26521 | 0.34% | 0.079% |
| 226 | 13.046 | 13.020 | 13.079 | VV | 1533 | 43387 | 0.55% | 0.130% |
| 227 | 13.101 | 13.079 | 13.162 | VV | 5067 | 153355 | 1.96% | 0.458% |
| 228 | 13.173 | 13.162 | 13.179 | VV | 1653 | 16255 | 0.21% | 0.049% |
| 229 | 13.184 | 13.179 | 13.220 | VV | 1647 | 34343 | 0.44% | 0.103% |
| 230 | 13.229 | 13.220 | 13.245 | VV | 1352 | 17980 | 0.23% | 0.054% |
| 231 | 13.250 | 13.245 | 13.254 | VV | 1274 | 6462 | 0.08% | 0.019% |
| 232 | 13.300 | 13.254 | 13.324 | VV | 1684 | 58197 | 0.74% | 0.174% |
| 233 | 13.332 | 13.324 | 13.350 | VV | 1312 | 18999 | 0.24% | 0.057% |
| 234 | 13.380 | 13.350 | 13.411 | VV | 2222 | 55280 | 0.71% | 0.165% |
| 235 | 13.433 | 13.411 | 13.467 | VV | 3594 | 63191 | 0.81% | 0.189% |
| 236 | 13.471 | 13.467 | 13.487 | VV | 926 | 10108 | 0.13% | 0.030% |
| 237 | 13.491 | 13.487 | 13.513 | VV | 933 | 12302 | 0.16% | 0.037% |
| 238 | 13.535 | 13.513 | 13.567 | VV | 1390 | 34223 | 0.44% | 0.102% |
| 239 | 13.574 | 13.567 | 13.586 | VV | 885 | 8980 | 0.11% | 0.027% |
| 240 | 13.594 | 13.586 | 13.616 | VV | 829 | 12690 | 0.16% | 0.038% |
| 241 | 13.624 | 13.616 | 13.629 | VV | 866 | 6017 | 0.08% | 0.018% |
| 242 | 13.655 | 13.629 | 13.679 | VV | 928 | 26310 | 0.34% | 0.079% |
| 243 | 13.687 | 13.679 | 13.712 | VV | 938 | 16663 | 0.21% | 0.050% |
| 244 | 13.725 | 13.712 | 13.750 | VV | 1006 | 18780 | 0.24% | 0.056% |
| 245 | 13.767 | 13.750 | 13.805 | VV | 1144 | 29594 | 0.38% | 0.088% |
| 246 | 13.823 | 13.805 | 13.848 | VV | 862 | 19290 | 0.25% | 0.058% |

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|---|---|---|---|---|---|---|---|---|
| 247 | 13.891 | 13.848 | 13.945 | VV | 1688 | 70454 | 0.90% | 0.210% |
| 248 | 13.951 | 13.945 | 13.957 | VV | 1196 | 8246 | 0.11% | 0.025% |
| 249 | 13.961 | 13.957 | 13.965 | VV | 1052 | 4894 | 0.06% | 0.015% |
| 250 | 13.975 | 13.965 | 13.984 | VV | 1214 | 11729 | 0.15% | 0.035% |
| 251 | 13.991 | 13.984 | 14.013 | VV | 1122 | 18856 | 0.24% | 0.056% |
| 252 | 14.021 | 14.013 | 14.040 | VV | 1043 | 15726 | 0.20% | 0.047% |
| 253 | 14.067 | 14.040 | 14.092 | VV | 1235 | 32653 | 0.42% | 0.098% |
| 254 | 14.101 | 14.092 | 14.110 | VV | 1301 | 13292 | 0.17% | 0.040% |
| 255 | 14.121 | 14.110 | 14.140 | VV | 1313 | 21979 | 0.28% | 0.066% |
| 256 | 14.146 | 14.140 | 14.152 | VV | 1229 | 8220 | 0.11% | 0.025% |
| 257 | 14.163 | 14.152 | 14.188 | VV | 1294 | 25349 | 0.32% | 0.076% |
| 258 | 14.198 | 14.188 | 14.221 | VV | 1339 | 23084 | 0.30% | 0.069% |
| 259 | 14.251 | 14.221 | 14.256 | VV | 1338 | 24984 | 0.32% | 0.075% |
| 260 | 14.289 | 14.256 | 14.316 | VV | 1595 | 50419 | 0.64% | 0.151% |
| 261 | 14.333 | 14.316 | 14.374 | VV | 1752 | 47941 | 0.61% | 0.143% |
| 262 | 14.393 | 14.374 | 14.420 | VV | 2239 | 31752 | 0.41% | 0.095% |
| 263 | 14.447 | 14.420 | 14.464 | VV | 1154 | 28488 | 0.36% | 0.085% |
| 264 | 14.492 | 14.464 | 14.515 | VV | 2142 | 48551 | 0.62% | 0.145% |
| 265 | 14.533 | 14.515 | 14.571 | VV | 3330 | 63161 | 0.81% | 0.189% |
| 266 | 14.575 | 14.571 | 14.581 | VV | 1065 | 6113 | 0.08% | 0.018% |
| 267 | 14.592 | 14.581 | 14.607 | VV | 1028 | 15261 | 0.20% | 0.046% |
| 268 | 14.613 | 14.607 | 14.627 | VV | 1076 | 10965 | 0.14% | 0.033% |
| 269 | 14.631 | 14.627 | 14.635 | VV | 843 | 4095 | 0.05% | 0.012% |
| 270 | 14.643 | 14.635 | 14.657 | VV | 897 | 11112 | 0.14% | 0.033% |
| 271 | 14.699 | 14.657 | 14.749 | VV | 2038 | 65950 | 0.84% | 0.197% |
| 272 | 14.752 | 14.749 | 14.760 | VV | 1010 | 6970 | 0.09% | 0.021% |
| 273 | 14.764 | 14.760 | 14.777 | VV | 1031 | 9763 | 0.12% | 0.029% |
| 274 | 14.785 | 14.777 | 14.797 | VV | 1199 | 11730 | 0.15% | 0.035% |
| 275 | 14.803 | 14.797 | 14.812 | VV | 1105 | 8773 | 0.11% | 0.026% |
| 276 | 14.831 | 14.812 | 14.855 | VV | 1087 | 24952 | 0.32% | 0.075% |
| 277 | 14.867 | 14.855 | 14.877 | VV | 1209 | 15006 | 0.19% | 0.045% |
| 278 | 14.881 | 14.877 | 14.900 | VV | 1233 | 15252 | 0.20% | 0.046% |
| 279 | 14.909 | 14.900 | 14.915 | VV | 1230 | 10593 | 0.14% | 0.032% |
| 280 | 14.959 | 14.915 | 14.971 | VV | 1579 | 44673 | 0.57% | 0.133% |
| 281 | 15.001 | 14.971 | 15.030 | VV | 1840 | 53695 | 0.69% | 0.160% |
| 282 | 15.074 | 15.030 | 15.135 | VV | 3557 | 117688 | 1.51% | 0.351% |
| 283 | 15.152 | 15.135 | 15.165 | VV | 1411 | 23905 | 0.31% | 0.071% |
| 284 | 15.187 | 15.165 | 15.210 | VV | 1632 | 38418 | 0.49% | 0.115% |
| 285 | 15.214 | 15.210 | 15.220 | VV | 1373 | 7630 | 0.10% | 0.023% |
| 286 | 15.244 | 15.220 | 15.269 | VV | 1932 | 47431 | 0.61% | 0.142% |
| 287 | 15.278 | 15.269 | 15.306 | VV | 1490 | 29475 | 0.38% | 0.088% |
| 288 | 15.313 | 15.306 | 15.319 | VV | 1251 | 8986 | 0.11% | 0.027% |
| 289 | 15.331 | 15.319 | 15.343 | VV | 1336 | 18937 | 0.24% | 0.057% |
| 290 | 15.355 | 15.343 | 15.362 | VV | 1373 | 15134 | 0.19% | 0.045% |
| 291 | 15.369 | 15.362 | 15.382 | VV | 1549 | 17137 | 0.22% | 0.051% |
| 292 | 15.393 | 15.382 | 15.419 | VV | 1710 | 33099 | 0.42% | 0.099% |
| 293 | 15.435 | 15.419 | 15.459 | VV | 1487 | 30262 | 0.39% | 0.090% |
| 294 | 15.480 | 15.459 | 15.486 | VV | 1138 | 17439 | 0.22% | 0.052% |
| 295 | 15.512 | 15.486 | 15.526 | VV | 1983 | 35724 | 0.46% | 0.107% |
| 296 | 15.549 | 15.526 | 15.575 | VV | 2963 | 60656 | 0.78% | 0.181% |
| 297 | 15.588 | 15.575 | 15.637 | VV | 1643 | 51584 | 0.66% | 0.154% |
| 298 | 15.642 | 15.637 | 15.682 | VV | 1271 | 28923 | 0.37% | 0.086% |
| 299 | 15.699 | 15.682 | 15.711 | VV | 1176 | 18735 | 0.24% | 0.056% |

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|---|---|---|---|---|---|---|---|---|
| 300 | 15.724 | 15.711 | 15.730 | VV | 1251 | 13380 | 0.17% | 0.040% |
| 301 | 15.738 | 15.730 | 15.767 | VV | 1244 | 24228 | 0.31% | 0.072% |
| 302 | 15.786 | 15.767 | 15.802 | VV | 1322 | 24777 | 0.32% | 0.074% |
| 303 | 15.808 | 15.802 | 15.827 | VV | 1147 | 16639 | 0.21% | 0.050% |
| 304 | 15.832 | 15.827 | 15.854 | VV | 1234 | 18518 | 0.24% | 0.055% |
| 305 | 15.860 | 15.854 | 15.867 | VV | 1344 | 9692 | 0.12% | 0.029% |
| 306 | 15.870 | 15.867 | 15.880 | VV | 1256 | 9343 | 0.12% | 0.028% |
| 307 | 15.885 | 15.880 | 15.892 | VV | 1206 | 7797 | 0.10% | 0.023% |
| 308 | 15.908 | 15.892 | 15.929 | VV | 1259 | 26049 | 0.33% | 0.078% |
| 309 | 15.934 | 15.929 | 15.939 | VV | 1163 | 7428 | 0.10% | 0.022% |
| 310 | 15.948 | 15.939 | 15.958 | VV | 1187 | 12669 | 0.16% | 0.038% |
| 311 | 15.990 | 15.958 | 16.015 | VV | 1767 | 49242 | 0.63% | 0.147% |
| 312 | 16.035 | 16.015 | 16.054 | VV | 1782 | 36146 | 0.46% | 0.108% |
| 313 | 16.062 | 16.054 | 16.080 | VV | 1310 | 20622 | 0.26% | 0.062% |
| 314 | 16.120 | 16.080 | 16.177 | VV | 4944 | 144325 | 1.85% | 0.431% |
| 315 | 16.182 | 16.177 | 16.186 | VV | 1689 | 8627 | 0.11% | 0.026% |
| 316 | 16.197 | 16.186 | 16.216 | VV | 1743 | 30390 | 0.39% | 0.091% |
| 317 | 16.230 | 16.216 | 16.255 | VV | 1800 | 39728 | 0.51% | 0.119% |
| 318 | 16.275 | 16.255 | 16.290 | VV | 1846 | 35750 | 0.46% | 0.107% |
| 319 | 16.300 | 16.290 | 16.309 | VV | 1841 | 20146 | 0.26% | 0.060% |
| 320 | 16.314 | 16.309 | 16.327 | VV | 1867 | 19952 | 0.26% | 0.060% |
| 321 | 16.332 | 16.327 | 16.348 | VV | 1938 | 22288 | 0.29% | 0.067% |
| 322 | 16.354 | 16.348 | 16.359 | VV | 1797 | 11407 | 0.15% | 0.034% |
| 323 | 16.384 | 16.359 | 16.394 | VV | 2061 | 40550 | 0.52% | 0.121% |
| 324 | 16.401 | 16.394 | 16.430 | VV | 2266 | 42056 | 0.54% | 0.126% |
| 325 | 16.434 | 16.430 | 16.441 | VV | 1742 | 11020 | 0.14% | 0.033% |
| 326 | 16.462 | 16.441 | 16.473 | VV | 2294 | 39060 | 0.50% | 0.117% |
| 327 | 16.493 | 16.473 | 16.513 | VV | 3383 | 64592 | 0.83% | 0.193% |
| 328 | 16.538 | 16.513 | 16.567 | VV | 4764 | 96181 | 1.23% | 0.287% |
| 329 | 16.572 | 16.567 | 16.584 | VV | 1846 | 18533 | 0.24% | 0.055% |
| 330 | 16.588 | 16.584 | 16.613 | VV | 1840 | 29569 | 0.38% | 0.088% |
| 331 | 16.618 | 16.613 | 16.637 | VV | 1677 | 21645 | 0.28% | 0.065% |
| 332 | 16.639 | 16.637 | 16.648 | VV | 1564 | 9525 | 0.12% | 0.028% |
| 333 | 16.652 | 16.648 | 16.655 | VV | 1469 | 6238 | 0.08% | 0.019% |
| 334 | 16.659 | 16.655 | 16.693 | VV | 1526 | 33210 | 0.42% | 0.099% |
| 335 | 16.700 | 16.693 | 16.707 | VV | 1498 | 11967 | 0.15% | 0.036% |
| 336 | 16.714 | 16.707 | 16.729 | VV | 1479 | 18183 | 0.23% | 0.054% |
| 337 | 16.731 | 16.729 | 16.744 | VV | 1464 | 12305 | 0.16% | 0.037% |
| 338 | 16.761 | 16.744 | 16.778 | VV | 1547 | 29121 | 0.37% | 0.087% |
| 339 | 16.790 | 16.778 | 16.795 | VV | 1553 | 15431 | 0.20% | 0.046% |
| 340 | 16.811 | 16.795 | 16.822 | VV | 1878 | 27722 | 0.35% | 0.083% |
| 341 | 16.826 | 16.822 | 16.874 | VV | 1751 | 49690 | 0.64% | 0.148% |
| 342 | 16.881 | 16.874 | 16.901 | VV | 1611 | 24961 | 0.32% | 0.075% |
| 343 | 16.946 | 16.901 | 17.010 | VV | 2824 | 123108 | 1.57% | 0.368% |
| 344 | 17.014 | 17.010 | 17.019 | VV | 1668 | 9151 | 0.12% | 0.027% |
| 345 | 17.039 | 17.019 | 17.049 | VV | 1923 | 31087 | 0.40% | 0.093% |
| 346 | 17.055 | 17.049 | 17.075 | VV | 1856 | 28077 | 0.36% | 0.084% |
| 347 | 17.082 | 17.075 | 17.087 | VV | 1784 | 12572 | 0.16% | 0.038% |
| 348 | 17.090 | 17.087 | 17.097 | VV | 1718 | 9225 | 0.12% | 0.028% |
| 349 | 17.101 | 17.097 | 17.103 | VV | 1653 | 6266 | 0.08% | 0.019% |
| 350 | 17.110 | 17.103 | 17.120 | VV | 1763 | 16882 | 0.22% | 0.050% |
| 351 | 17.125 | 17.120 | 17.135 | VV | 1717 | 14837 | 0.19% | 0.044% |

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| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 352 | 17.166 | 17.135 | 17.211 | VV | 2257 | 91454 | 1.17% | 0.273% |
| 353 | 17.231 | 17.211 | 17.255 | VV | 2328 | 55700 | 0.71% | 0.166% |
| 354 | 17.269 | 17.255 | 17.277 | VV | 2102 | 26402 | 0.34% | 0.079% |
| 355 | 17.297 | 17.277 | 17.317 | VV | 2205 | 48358 | 0.62% | 0.144% |
| 356 | 17.349 | 17.317 | 17.359 | VV | 2615 | 58402 | 0.75% | 0.174% |
| 357 | 17.376 | 17.359 | 17.432 | VV | 4304 | 114941 | 1.47% | 0.343% |
| 358 | 17.449 | 17.432 | 17.463 | VV | 1958 | 34814 | 0.45% | 0.104% |
| 359 | 17.480 | 17.463 | 17.494 | VV | 2124 | 35918 | 0.46% | 0.107% |
| 360 | 17.495 | 17.494 | 17.508 | VV | 1982 | 16412 | 0.21% | 0.049% |
| 361 | 17.541 | 17.508 | 17.550 | VV | 2073 | 49676 | 0.64% | 0.148% |
| 362 | 17.555 | 17.550 | 17.563 | VV | 1957 | 13887 | 0.18% | 0.041% |
| 363 | 17.575 | 17.563 | 17.607 | VV | 1955 | 47658 | 0.61% | 0.142% |
| 364 | 17.612 | 17.607 | 17.632 | VV | 1794 | 26340 | 0.34% | 0.079% |
| 365 | 17.659 | 17.632 | 17.679 | VV | 2009 | 52538 | 0.67% | 0.157% |
| 366 | 17.682 | 17.679 | 17.723 | VV | 1883 | 46910 | 0.60% | 0.140% |
| 367 | 17.739 | 17.723 | 17.759 | VV | 1969 | 40380 | 0.52% | 0.121% |
| 368 | 17.796 | 17.759 | 17.827 | VV | 3662 | 103231 | 1.32% | 0.308% |
| 369 | 17.832 | 17.827 | 17.854 | VV | 2144 | 33458 | 0.43% | 0.100% |
| 370 | 17.859 | 17.854 | 17.864 | VV | 2086 | 12248 | 0.16% | 0.037% |
| 371 | 17.869 | 17.864 | 17.880 | VV | 2060 | 18683 | 0.24% | 0.056% |
| 372 | 17.926 | 17.880 | 17.935 | VV | 2227 | 68439 | 0.88% | 0.204% |
| 373 | 17.939 | 17.935 | 17.954 | VV | 2136 | 22783 | 0.29% | 0.068% |
| 374 | 17.966 | 17.954 | 17.977 | VV | 2229 | 29176 | 0.37% | 0.087% |
| 375 | 17.991 | 17.977 | 18.014 | VV | 2258 | 46255 | 0.59% | 0.138% |
| 376 | 18.024 | 18.014 | 18.035 | VV | 2150 | 27207 | 0.35% | 0.081% |
| 377 | 18.057 | 18.035 | 18.071 | VV | 2311 | 46900 | 0.60% | 0.140% |
| 378 | 18.204 | 18.071 | 18.252 | VV | 5413 | 321612 | 4.11% | 0.960% |
| 379 | 18.267 | 18.252 | 18.300 | VBA | 2937 | 82931 | 1.06% | 0.248% |

Sum of corrected areas: 33488416

Aromatic EPH 021125.M Fri Feb 28 02:10:08 2025

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Weston Solutions, Inc. | Date Collected: | 02/24/25 |
| Project: | RFP 905 | Date Received: | 02/24/25 |
| Client Sample ID: | P001-CLAY-CF02-01 | SDG No.: | Q1421 |
| Lab Sample ID: | Q1421-09 | Matrix: | Solid |
| Analytical Method: | NJEPH | % Solid: | 78.4 |
| Sample Wt/Vol: | 30.02 Units: g | Final Vol: | 2000 uL |
| Soil Aliquot Vol: | uL | Test: | EPH |
| Prep Method : | | | |

| Prep Date : | Date Analyzed : | Prep Batch ID |
|---|---|---|
| 02/27/25 13:10 | 02/28/25 20:09 | PB166923 |

| CAS Number | Parameter | Conc. | Qualifier | Dilution | MDL | LOQ / CRQL | Units(Dry Weight) | Datafile |
|---|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | | |
| Aliphatic C9-C12 | Aliphatic C9-C12 | 0.48 | U | 1 | 0.48 | 1.27 | mg/kg | FC068336.D |
| Aliphatic C12-C16 | Aliphatic C12-C16 | 0.55 | J | 1 | 0.31 | 0.85 | mg/kg | FC068336.D |
| Aliphatic C16-C21 | Aliphatic C16-C21 | 0.49 | J | 1 | 0.38 | 1.27 | mg/kg | FC068336.D |
| Aliphatic C21-C28 | Aliphatic C21-C28 | 1.02 | U | 1 | 1.02 | 1.70 | mg/kg | FC068336.D |
| Aliphatic C28-C40 | Aliphatic C28-C40 | 2.37 | J | 1 | 2.29 | 2.55 | mg/kg | FC068336.D |
| Aromatic C10-C12 | Aromatic C10-C12 | 0.38 | U | 1 | 0.38 | 0.85 | mg/kg | FD049144.D |
| Aromatic C12-C16 | Aromatic C12-C16 | 0.45 | J | 1 | 0.43 | 1.27 | mg/kg | FD049144.D |
| Aromatic C16-C21 | Aromatic C16-C21 | 1.67 | J | 1 | 1.22 | 2.12 | mg/kg | FD049144.D |
| Aromatic C21-C36 | Aromatic C21-C36 | 2.55 | U | 1 | 2.55 | 3.40 | mg/kg | FD049144.D |
| Total AliphaticEPH | Total AliphaticEPH | 4.48 | U | | 4.48 | 7.64 | mg/kg | |
| Total AromaticEPH | Total AromaticEPH | 4.59 | U | | 4.59 | 7.64 | mg/kg | |
| Total EPH | Total EPH | 9.07 | U | | 9.07 | 15.3 | mg/kg | |

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control 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

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Weston Solutions, Inc. | Date Collected: | 02/24/25 |
| Project: | RFP 905 | Date Received: | 02/24/25 |
| Client Sample ID: | P001-CLAY-CF02-01 | SDG No.: | Q1421 |
| Lab Sample ID: | Q1421-09 | Matrix: | Solid |
| Analytical Method: | NJEPH | % Solid: | 78.4 |
| Sample Wt/Vol: | 30.02 Units: g | Final Vol: | 2000 uL |
| Soil Aliquot Vol: | uL | Test: | EPH |
| Prep Method : | | | |

| File ID : | Dilution: | Prep Date : | Date Analyzed : | Prep Batch ID |
|---|---|---|---|---|
| FC068336.D | 1 | 02/27/25 | 02/28/25 | PB166923 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| Aliphatic C9-C12 | Aliphatic C9-C12 | 0.48 | U | 0.48 | 1.27 | mg/kg |
| Aliphatic C12-C16 | Aliphatic C12-C16 | 0.55 | J | 0.31 | 0.85 | mg/kg |
| Aliphatic C16-C21 | Aliphatic C16-C21 | 0.49 | J | 0.38 | 1.27 | mg/kg |
| Aliphatic C21-C28 | Aliphatic C21-C28 | 1.02 | U | 1.02 | 1.70 | mg/kg |
| Aliphatic C28-C40 | Aliphatic C28-C40 | 2.37 | J | 2.29 | 2.55 | mg/kg |
| **SURROGATES** | | | | | | |
| 3383-33-2 | 1-chlorooctadecane (SURR) | 30.5 | | 40 - 140 | 61% | SPK: 50 |
| 84-15-1 | ortho-Terphenyl (SURR) | 0.00 | | 40 - 140 | 0% | SPK: 50 |

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

# Quantitation Report For Aliphatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | Q1421-09 | Acq On: | 28 Feb 2025 20:09 |
| Client Sample ID: | P001-CLAY-CF02-01 | Operator: | YP/AJ |
| Data file: | FC068336.D | Misc: | |
| Instrument: | FID_C | ALS Vial: | 23 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aliphatic C9-C12 | 3.104 | 6.369 | 543312 | 3.852 | 300 | ug/ml |
| Aliphatic C12-C16 | 6.370 | 9.754 | 876350 | 6.413 | 200 | ug/ml |
| Aliphatic C16-C21 | 9.755 | 13.107 | 762371 | 5.792 | 300 | ug/ml |
| Aliphatic C21-C28 | 13.108 | 16.761 | 744063 | 6.065 | 400 | ug/ml |
| Aliphatic C28-C40 | 16.762 | 21.565 | 2863890 | 27.846 | 600 | ug/ml |
| Aliphatic EPH | 3.104 | 21.565 | 5789986 | 49.968 | | ug/ml |
| ortho-Terphenyl (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |
| 1-chlorooctadecane (SURR) | 12.838 | 12.838 | 3429125 | 30.49 | | ug/ml |
| Aliphatic C9-C28 | 3.104 | 16.761 | 2926096 | 22.122 | 1200 | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022825AL\
Data File : FC068336.D
Signal(s) : FID1A.ch
Acq On : 28 Feb 2025 20:09
Operator : YP/AJ
Sample : Q1421-09
Misc :
ALS Vial : 23 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
P001-CLAY-CF02-01

Integration File: autoint1.e
Quant Time: Mar 05 05:25:15 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

| Compound | R.T. | Response | Conc Units |
|---|---|---|---|
| System Monitoring Compounds | | | |
| 12) S 1-chlorooctadecane (S... | 12.838 | 3429125 | 30.488 ug/ml |
| Spiked Amount 50.000 | | Recovery = 60.98% | |
| Target Compounds | | | |

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

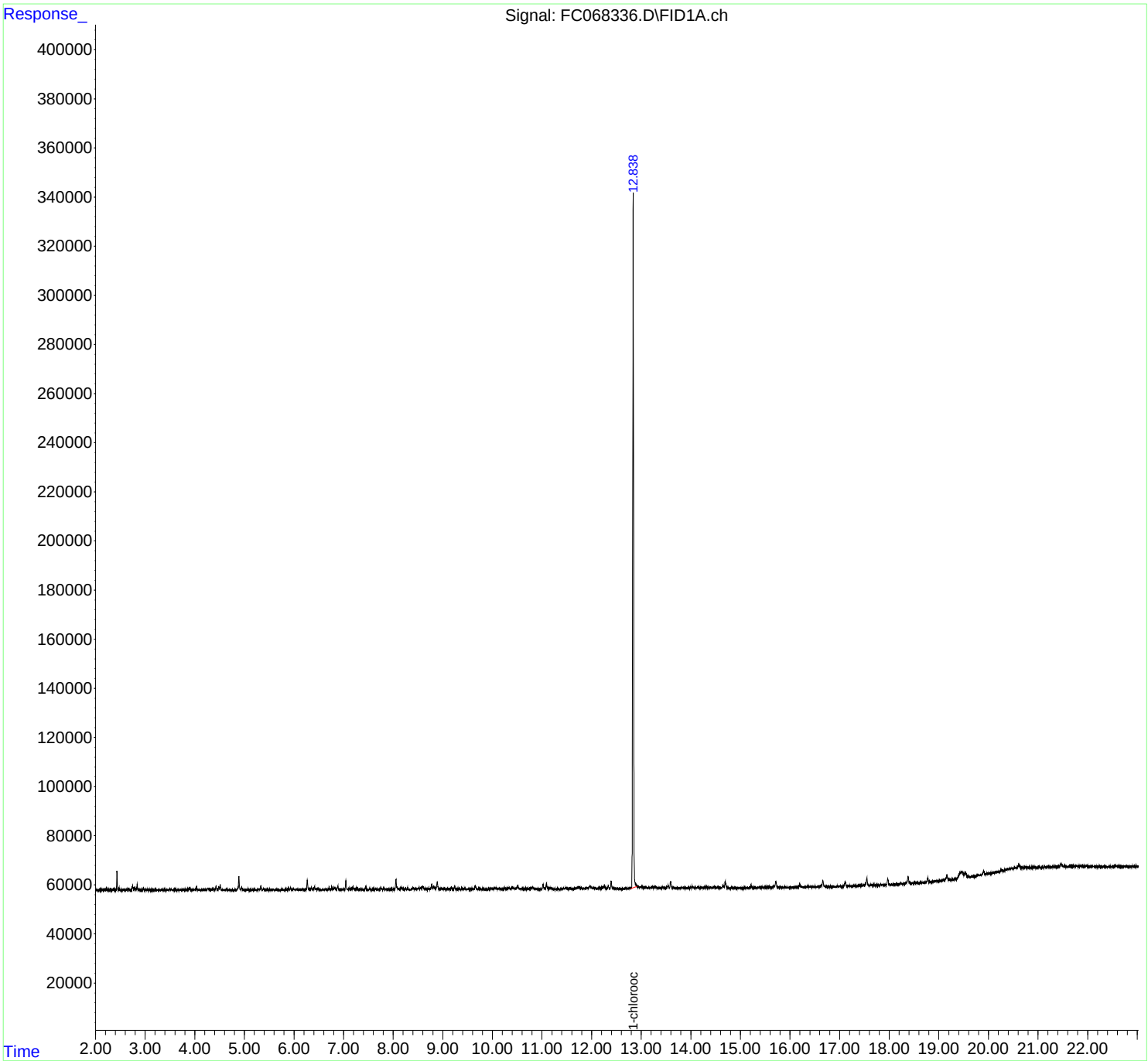
Quantitation Report (QT Reviewed)

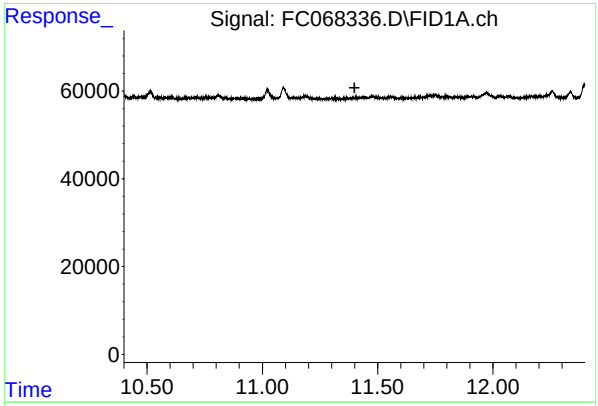
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022825AL\
Data File : FC068336.D
Signal(s) : FID1A.ch
Acq On : 28 Feb 2025 20:09
Operator : YP/AJ
Sample : Q1421-09
Misc :
ALS Vial : 23 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
P001-CLAY-CF02-01

Integration File: autoint1.e
Quant Time: Mar 05 05:25:15 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

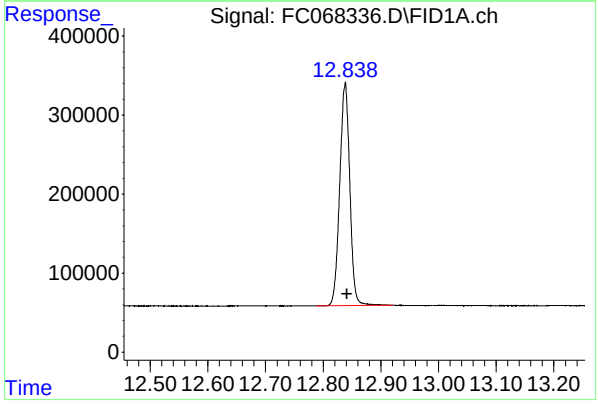





#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.400 min
Response: 0
Conc: N.D.

**Instrument :**
FID_C
**ClientSampleId :**
P001-CLAY-CF02-01




#12 1-chlorooctadecane (SURR)

R.T.: 12.838 min
Delta R.T.: -0.004 min
Response: 3429125
Conc: 30.49 ug/ml

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Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022825AL\
Data File : FC068336.D
Signal(s) : FID1A.ch
Acq On : 28 Feb 2025 20:09
Sample : Q1421-09
Misc :
ALS Vial : 23 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Title : GC Extractables

Signal : FID1A.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 2.359 | 2.304 | 2.401 | BV | 475 | 3411 | 0.10% | 0.035% |
| 2 | 2.432 | 2.401 | 2.455 | PV | 7767 | 59409 | 1.69% | 0.610% |
| 3 | 2.472 | 2.455 | 2.538 | VV | 1005 | 11614 | 0.33% | 0.119% |
| 4 | 2.561 | 2.538 | 2.573 | VV | 74 | 1278 | 0.04% | 0.013% |
| 5 | 2.591 | 2.573 | 2.609 | VV | 292 | 3007 | 0.09% | 0.031% |
| 6 | 2.655 | 2.609 | 2.700 | VV | 419 | 8261 | 0.24% | 0.085% |
| 7 | 2.744 | 2.700 | 2.774 | VV | 1499 | 25758 | 0.73% | 0.264% |
| 8 | 2.788 | 2.774 | 2.817 | VV | 1401 | 14955 | 0.43% | 0.154% |
| 9 | 2.838 | 2.817 | 2.896 | VV | 2559 | 27602 | 0.79% | 0.283% |
| 10 | 2.918 | 2.896 | 2.937 | VV | 225 | 3722 | 0.11% | 0.038% |
| 11 | 2.961 | 2.937 | 3.048 | VV | 1001 | 16461 | 0.47% | 0.169% |
| 12 | 3.087 | 3.048 | 3.154 | VV | 222 | 6097 | 0.17% | 0.063% |
| 13 | 3.163 | 3.154 | 3.174 | VV | 72 | 904 | 0.03% | 0.009% |
| 14 | 3.184 | 3.174 | 3.194 | VV | 120 | 895 | 0.03% | 0.009% |
| 15 | 3.207 | 3.194 | 3.264 | VV | 391 | 6009 | 0.17% | 0.062% |
| 16 | 3.271 | 3.264 | 3.283 | VV | 83 | 997 | 0.03% | 0.010% |
| 17 | 3.298 | 3.283 | 3.311 | VV | 126 | 1380 | 0.04% | 0.014% |
| 18 | 3.327 | 3.311 | 3.339 | VV | 139 | 1855 | 0.05% | 0.019% |
| 19 | 3.350 | 3.339 | 3.371 | VV | 162 | 1752 | 0.05% | 0.018% |
| 20 | 3.407 | 3.371 | 3.429 | VV | 144 | 2926 | 0.08% | 0.030% |
| 21 | 3.499 | 3.429 | 3.511 | VV | 683 | 10090 | 0.29% | 0.104% |
| 22 | 3.525 | 3.511 | 3.555 | VV | 425 | 5294 | 0.15% | 0.054% |
| 23 | 3.573 | 3.555 | 3.597 | VV | 216 | 3867 | 0.11% | 0.040% |
| 24 | 3.614 | 3.597 | 3.624 | VV | 157 | 1583 | 0.05% | 0.016% |
| 25 | 3.700 | 3.624 | 3.759 | VV | 203 | 9723 | 0.28% | 0.100% |
| 26 | 3.778 | 3.759 | 3.824 | VV | 208 | 4882 | 0.14% | 0.050% |
| 27 | 3.836 | 3.824 | 3.845 | VV | 153 | 1476 | 0.04% | 0.015% |
| 28 | 3.865 | 3.845 | 3.877 | VV | 552 | 5690 | 0.16% | 0.058% |
| 29 | 3.893 | 3.877 | 3.942 | VV | 1258 | 16398 | 0.47% | 0.168% |
| 30 | 3.960 | 3.942 | 3.996 | VV | 237 | 5391 | 0.15% | 0.055% |
| 31 | 4.039 | 3.996 | 4.070 | VV | 1139 | 18318 | 0.52% | 0.188% |
| 32 | 4.084 | 4.070 | 4.098 | VV | 219 | 2451 | 0.07% | 0.025% |
| 33 | 4.132 | 4.098 | 4.140 | VV | 160 | 2872 | 0.08% | 0.029% |
| 34 | 4.160 | 4.140 | 4.171 | VV | 192 | 2768 | 0.08% | 0.028% |
| 35 | 4.195 | 4.171 | 4.244 | VV | 266 | 7242 | 0.21% | 0.074% |
| 36 | 4.263 | 4.244 | 4.319 | VV | 827 | 16873 | 0.48% | 0.173% |

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| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 37 | 4.334 | 4.319 | 4.346 | VV | 214 | 2855 | 0.08% | 0.029% |
| 38 | 4.372 | 4.346 | 4.395 | VV | 519 | 9275 | 0.26% | 0.095% |
| 39 | 4.428 | 4.395 | 4.451 | VV | 1746 | 21633 | 0.62% | 0.222% |
| 40 | 4.459 | 4.451 | 4.467 | VV | 404 | 3339 | 0.10% | 0.034% |
| 41 | 4.484 | 4.467 | 4.497 | VV | 1363 | 15107 | 0.43% | 0.155% |
| 42 | 4.513 | 4.497 | 4.564 | VV | 2227 | 26294 | 0.75% | 0.270% |
| 43 | 4.630 | 4.564 | 4.671 | VV | 327 | 11108 | 0.32% | 0.114% |
| 44 | 4.702 | 4.671 | 4.738 | VV | 207 | 4763 | 0.14% | 0.049% |
| 45 | 4.759 | 4.738 | 4.785 | VV | 94 | 1283 | 0.04% | 0.013% |
| 46 | 4.811 | 4.785 | 4.838 | VV | 413 | 5976 | 0.17% | 0.061% |
| 47 | 4.889 | 4.838 | 4.928 | VV | 5708 | 73847 | 2.11% | 0.758% |
| 48 | 4.946 | 4.928 | 4.978 | VV | 1182 | 14202 | 0.40% | 0.146% |
| 49 | 4.987 | 4.978 | 5.024 | VV | 147 | 2137 | 0.06% | 0.022% |
| 50 | 5.032 | 5.024 | 5.040 | PV | 40 | 304 | 0.01% | 0.003% |
| 51 | 5.078 | 5.040 | 5.144 | VV | 326 | 8082 | 0.23% | 0.083% |
| 52 | 5.154 | 5.144 | 5.178 | VV | 162 | 2177 | 0.06% | 0.022% |
| 53 | 5.257 | 5.178 | 5.273 | VV | 293 | 7007 | 0.20% | 0.072% |
| 54 | 5.292 | 5.273 | 5.314 | VV | 537 | 7436 | 0.21% | 0.076% |
| 55 | 5.332 | 5.314 | 5.371 | VV | 1843 | 21922 | 0.63% | 0.225% |
| 56 | 5.387 | 5.371 | 5.408 | VV | 554 | 6533 | 0.19% | 0.067% |
| 57 | 5.470 | 5.408 | 5.490 | VV | 335 | 8713 | 0.25% | 0.089% |
| 58 | 5.506 | 5.490 | 5.529 | VV | 142 | 3109 | 0.09% | 0.032% |
| 59 | 5.536 | 5.529 | 5.561 | VV | 203 | 2567 | 0.07% | 0.026% |
| 60 | 5.581 | 5.561 | 5.614 | VV | 355 | 5283 | 0.15% | 0.054% |
| 61 | 5.638 | 5.614 | 5.650 | VV | 234 | 2875 | 0.08% | 0.030% |
| 62 | 5.663 | 5.650 | 5.681 | VV | 168 | 2278 | 0.06% | 0.023% |
| 63 | 5.729 | 5.681 | 5.767 | VV | 200 | 7106 | 0.20% | 0.073% |
| 64 | 5.792 | 5.767 | 5.804 | VV | 196 | 3042 | 0.09% | 0.031% |
| 65 | 5.846 | 5.804 | 5.868 | VV | 340 | 8129 | 0.23% | 0.083% |
| 66 | 5.887 | 5.868 | 5.904 | VV | 436 | 6405 | 0.18% | 0.066% |
| 67 | 5.929 | 5.904 | 5.955 | VV | 895 | 13373 | 0.38% | 0.137% |
| 68 | 5.990 | 5.955 | 6.029 | VV | 400 | 10205 | 0.29% | 0.105% |
| 69 | 6.063 | 6.029 | 6.144 | VV | 487 | 15282 | 0.44% | 0.157% |
| 70 | 6.171 | 6.144 | 6.218 | VV | 275 | 5510 | 0.16% | 0.057% |
| 71 | 6.269 | 6.218 | 6.331 | VV | 4086 | 60160 | 1.72% | 0.618% |
| 72 | 6.350 | 6.331 | 6.370 | VV | 996 | 12359 | 0.35% | 0.127% |
| 73 | 6.386 | 6.370 | 6.399 | VV | 582 | 6840 | 0.20% | 0.070% |
| 74 | 6.417 | 6.399 | 6.437 | VV | 1583 | 17644 | 0.50% | 0.181% |
| 75 | 6.449 | 6.437 | 6.469 | VV | 528 | 6586 | 0.19% | 0.068% |
| 76 | 6.489 | 6.469 | 6.534 | VV | 811 | 11747 | 0.33% | 0.121% |
| 77 | 6.539 | 6.534 | 6.573 | VV | 190 | 2526 | 0.07% | 0.026% |
| 78 | 6.585 | 6.573 | 6.616 | VV | 123 | 2513 | 0.07% | 0.026% |
| 79 | 6.628 | 6.616 | 6.650 | VV | 183 | 2826 | 0.08% | 0.029% |
| 80 | 6.660 | 6.650 | 6.684 | VV | 204 | 2210 | 0.06% | 0.023% |
| 81 | 6.708 | 6.684 | 6.735 | VV | 903 | 11111 | 0.32% | 0.114% |
| 82 | 6.760 | 6.735 | 6.794 | VV | 1141 | 19848 | 0.57% | 0.204% |
| 83 | 6.809 | 6.794 | 6.853 | VV | 968 | 20660 | 0.59% | 0.212% |
| 84 | 6.887 | 6.853 | 6.918 | VV | 1546 | 23840 | 0.68% | 0.245% |
| 85 | 6.924 | 6.918 | 6.948 | VV | 275 | 3197 | 0.09% | 0.033% |
| 86 | 6.993 | 6.948 | 7.013 | VV | 374 | 8101 | 0.23% | 0.083% |
| 87 | 7.047 | 7.013 | 7.080 | VV | 3853 | 45082 | 1.29% | 0.463% |
| 88 | 7.124 | 7.080 | 7.139 | VV | 522 | 11803 | 0.34% | 0.121% |
| 89 | 7.155 | 7.139 | 7.168 | VV | 666 | 7230 | 0.21% | 0.074% |

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|---|---|---|---|---|---|---|---|---|
| 90 | 7.188 | 7.168 | 7.214 | VV | 1354 | 19948 | 0.57% | 0.205% |
| 91 | 7.249 | 7.214 | 7.265 | VV | 701 | 13439 | 0.38% | 0.138% |
| 92 | 7.279 | 7.265 | 7.329 | VV | 854 | 13228 | 0.38% | 0.136% |
| 93 | 7.337 | 7.329 | 7.383 | VV | 242 | 5414 | 0.15% | 0.056% |
| 94 | 7.394 | 7.383 | 7.415 | VV | 178 | 2480 | 0.07% | 0.025% |
| 95 | 7.448 | 7.415 | 7.486 | VV | 1511 | 19214 | 0.55% | 0.197% |
| 96 | 7.502 | 7.486 | 7.508 | VV | 140 | 1345 | 0.04% | 0.014% |
| 97 | 7.524 | 7.508 | 7.571 | VV | 344 | 7822 | 0.22% | 0.080% |
| 98 | 7.609 | 7.571 | 7.631 | VV | 303 | 8065 | 0.23% | 0.083% |
| 99 | 7.643 | 7.631 | 7.694 | VV | 316 | 8255 | 0.24% | 0.085% |
| 100 | 7.709 | 7.694 | 7.728 | VV | 346 | 4443 | 0.13% | 0.046% |
| 101 | 7.753 | 7.728 | 7.785 | VV | 1027 | 13578 | 0.39% | 0.139% |
| 102 | 7.809 | 7.785 | 7.828 | VV | 1035 | 13171 | 0.38% | 0.135% |
| 103 | 7.842 | 7.828 | 7.864 | VV | 353 | 5975 | 0.17% | 0.061% |
| 104 | 7.879 | 7.864 | 7.895 | VV | 358 | 4478 | 0.13% | 0.046% |
| 105 | 7.913 | 7.895 | 7.944 | VV | 344 | 4604 | 0.13% | 0.047% |
| 106 | 7.965 | 7.944 | 7.986 | VV | 447 | 5840 | 0.17% | 0.060% |
| 107 | 8.008 | 7.986 | 8.034 | VV | 231 | 4769 | 0.14% | 0.049% |
| 108 | 8.057 | 8.034 | 8.128 | VV | 4303 | 66857 | 1.91% | 0.686% |
| 109 | 8.165 | 8.128 | 8.184 | VV | 748 | 18163 | 0.52% | 0.186% |
| 110 | 8.202 | 8.184 | 8.227 | VV | 622 | 11129 | 0.32% | 0.114% |
| 111 | 8.249 | 8.227 | 8.271 | VV | 567 | 8644 | 0.25% | 0.089% |
| 112 | 8.288 | 8.271 | 8.318 | VV | 851 | 10073 | 0.29% | 0.103% |
| 113 | 8.402 | 8.318 | 8.424 | VV | 789 | 20447 | 0.58% | 0.210% |
| 114 | 8.445 | 8.424 | 8.457 | VV | 549 | 7610 | 0.22% | 0.078% |
| 115 | 8.469 | 8.457 | 8.488 | VV | 494 | 8056 | 0.23% | 0.083% |
| 116 | 8.513 | 8.488 | 8.529 | VV | 825 | 14357 | 0.41% | 0.147% |
| 117 | 8.544 | 8.529 | 8.558 | VV | 694 | 9921 | 0.28% | 0.102% |
| 118 | 8.594 | 8.558 | 8.638 | VV | 1337 | 34833 | 0.99% | 0.358% |
| 119 | 8.655 | 8.638 | 8.688 | VV | 617 | 9547 | 0.27% | 0.098% |
| 120 | 8.706 | 8.688 | 8.727 | VV | 552 | 8038 | 0.23% | 0.083% |
| 121 | 8.776 | 8.727 | 8.795 | VV | 2306 | 33343 | 0.95% | 0.342% |
| 122 | 8.811 | 8.795 | 8.864 | VV | 1259 | 33799 | 0.96% | 0.347% |
| 123 | 8.889 | 8.864 | 8.944 | VV | 3221 | 55481 | 1.58% | 0.570% |
| 124 | 8.962 | 8.944 | 8.984 | VV | 857 | 11473 | 0.33% | 0.118% |
| 125 | 9.011 | 8.984 | 9.038 | VV | 580 | 9457 | 0.27% | 0.097% |
| 126 | 9.092 | 9.038 | 9.108 | VV | 352 | 10042 | 0.29% | 0.103% |
| 127 | 9.114 | 9.108 | 9.132 | VV | 328 | 3499 | 0.10% | 0.036% |
| 128 | 9.177 | 9.132 | 9.216 | VV | 664 | 18559 | 0.53% | 0.191% |
| 129 | 9.239 | 9.216 | 9.278 | VV | 1415 | 22143 | 0.63% | 0.227% |
| 130 | 9.296 | 9.278 | 9.355 | VV | 316 | 9287 | 0.26% | 0.095% |
| 131 | 9.382 | 9.355 | 9.414 | VV | 567 | 10334 | 0.29% | 0.106% |
| 132 | 9.433 | 9.414 | 9.472 | VV | 584 | 11122 | 0.32% | 0.114% |
| 133 | 9.486 | 9.472 | 9.554 | VV | 312 | 7597 | 0.22% | 0.078% |
| 134 | 9.573 | 9.554 | 9.601 | VV | 465 | 7507 | 0.21% | 0.077% |
| 135 | 9.616 | 9.601 | 9.630 | VV | 238 | 3500 | 0.10% | 0.036% |
| 136 | 9.654 | 9.630 | 9.702 | VV | 1677 | 26847 | 0.77% | 0.276% |
| 137 | 9.726 | 9.702 | 9.738 | VV | 450 | 7180 | 0.20% | 0.074% |
| 138 | 9.750 | 9.738 | 9.779 | VV | 412 | 7673 | 0.22% | 0.079% |
| 139 | 9.796 | 9.779 | 9.811 | VV | 373 | 5251 | 0.15% | 0.054% |
| 140 | 9.823 | 9.811 | 9.853 | VV | 358 | 4198 | 0.12% | 0.043% |
| 141 | 9.900 | 9.853 | 9.911 | PV | 208 | 4596 | 0.13% | 0.047% |

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|---|---|---|---|---|---|---|---|---|
| 142 | 9.931 | 9.911 | 9.944 | VV | 348 | 4674 | 0.13% | 0.048% |
| 143 | 9.970 | 9.944 | 10.010 | VV | 592 | 14063 | 0.40% | 0.144% |
| 144 | 10.046 | 10.010 | 10.062 | VV | 627 | 14144 | 0.40% | 0.145% |
| 145 | 10.079 | 10.062 | 10.103 | VV | 562 | 10202 | 0.29% | 0.105% |
| 146 | 10.125 | 10.103 | 10.144 | VV | 473 | 9075 | 0.26% | 0.093% |
| 147 | 10.160 | 10.144 | 10.185 | VV | 391 | 6115 | 0.17% | 0.063% |
| 148 | 10.207 | 10.185 | 10.220 | VV | 294 | 4792 | 0.14% | 0.049% |
| 149 | 10.249 | 10.220 | 10.264 | VV | 646 | 10661 | 0.30% | 0.109% |
| 150 | 10.282 | 10.264 | 10.304 | VV | 530 | 9802 | 0.28% | 0.101% |
| 151 | 10.333 | 10.304 | 10.354 | VV | 747 | 14645 | 0.42% | 0.150% |
| 152 | 10.394 | 10.354 | 10.424 | VV | 823 | 23569 | 0.67% | 0.242% |
| 153 | 10.443 | 10.424 | 10.457 | VV | 583 | 8509 | 0.24% | 0.087% |
| 154 | 10.475 | 10.457 | 10.488 | VV | 617 | 8813 | 0.25% | 0.090% |
| 155 | 10.514 | 10.488 | 10.543 | VV | 1688 | 29712 | 0.85% | 0.305% |
| 156 | 10.557 | 10.543 | 10.593 | VV | 344 | 9439 | 0.27% | 0.097% |
| 157 | 10.606 | 10.593 | 10.635 | VV | 407 | 6646 | 0.19% | 0.068% |
| 158 | 10.642 | 10.635 | 10.654 | VV | 178 | 1754 | 0.05% | 0.018% |
| 159 | 10.675 | 10.654 | 10.684 | VV | 295 | 4177 | 0.12% | 0.043% |
| 160 | 10.711 | 10.684 | 10.740 | VV | 479 | 10334 | 0.29% | 0.106% |
| 161 | 10.752 | 10.740 | 10.768 | VV | 408 | 5377 | 0.15% | 0.055% |
| 162 | 10.811 | 10.768 | 10.831 | VV | 786 | 17633 | 0.50% | 0.181% |
| 163 | 10.840 | 10.831 | 10.859 | VV | 325 | 3589 | 0.10% | 0.037% |
| 164 | 10.875 | 10.859 | 10.928 | VV | 237 | 6629 | 0.19% | 0.068% |
| 165 | 10.941 | 10.928 | 10.958 | VV | 148 | 1418 | 0.04% | 0.015% |
| 166 | 10.961 | 10.958 | 10.968 | VV | 90 | 354 | 0.01% | 0.004% |
| 167 | 10.975 | 10.968 | 10.986 | VV | 66 | 512 | 0.01% | 0.005% |
| 168 | 11.022 | 10.986 | 11.054 | VV | 2094 | 31627 | 0.90% | 0.325% |
| 169 | 11.092 | 11.054 | 11.121 | VV | 2587 | 40470 | 1.15% | 0.415% |
| 170 | 11.148 | 11.121 | 11.161 | VV | 323 | 6825 | 0.19% | 0.070% |
| 171 | 11.186 | 11.161 | 11.224 | VV | 705 | 13456 | 0.38% | 0.138% |
| 172 | 11.241 | 11.224 | 11.263 | VV | 108 | 1709 | 0.05% | 0.018% |
| 173 | 11.275 | 11.263 | 11.282 | VV | 138 | 825 | 0.02% | 0.008% |
| 174 | 11.300 | 11.282 | 11.351 | VV | 226 | 4147 | 0.12% | 0.043% |
| 175 | 11.404 | 11.351 | 11.418 | VV | 293 | 7770 | 0.22% | 0.080% |
| 176 | 11.445 | 11.418 | 11.460 | VV | 386 | 8673 | 0.25% | 0.089% |
| 177 | 11.477 | 11.460 | 11.514 | VV | 634 | 12417 | 0.35% | 0.127% |
| 178 | 11.523 | 11.514 | 11.535 | VV | 294 | 2889 | 0.08% | 0.030% |
| 179 | 11.555 | 11.535 | 11.591 | VV | 565 | 10836 | 0.31% | 0.111% |
| 180 | 11.609 | 11.591 | 11.632 | VV | 234 | 3719 | 0.11% | 0.038% |
| 181 | 11.682 | 11.632 | 11.698 | VV | 415 | 11047 | 0.32% | 0.113% |
| 182 | 11.747 | 11.698 | 11.787 | VV | 878 | 31977 | 0.91% | 0.328% |
| 183 | 11.799 | 11.787 | 11.828 | VV | 569 | 10211 | 0.29% | 0.105% |
| 184 | 11.841 | 11.828 | 11.871 | VV | 412 | 8966 | 0.26% | 0.092% |
| 185 | 11.891 | 11.871 | 11.932 | VV | 609 | 15946 | 0.45% | 0.164% |
| 186 | 11.972 | 11.932 | 12.012 | VV | 1380 | 36910 | 1.05% | 0.379% |
| 187 | 12.031 | 12.012 | 12.058 | VV | 687 | 13072 | 0.37% | 0.134% |
| 188 | 12.070 | 12.058 | 12.111 | VV | 687 | 11539 | 0.33% | 0.118% |
| 189 | 12.167 | 12.111 | 12.184 | VV | 551 | 16849 | 0.48% | 0.173% |
| 190 | 12.257 | 12.184 | 12.303 | VV | 1762 | 48521 | 1.38% | 0.498% |
| 191 | 12.336 | 12.303 | 12.368 | VV | 1549 | 24274 | 0.69% | 0.249% |
| 192 | 12.396 | 12.368 | 12.444 | VV | 3285 | 47994 | 1.37% | 0.493% |
| 193 | 12.462 | 12.444 | 12.489 | VV | 359 | 6719 | 0.19% | 0.069% |
| 194 | 12.505 | 12.489 | 12.566 | VV | 307 | 8815 | 0.25% | 0.090% |

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|---|---|---|---|---|---|---|---|---|
| 195 | 12.579 | 12.566 | 12.591 | VV | 126 | 1645 | 0.05% | 0.017% |
| 196 | 12.684 | 12.623 | 12.700 | PV | 340 | 10713 | 0.31% | 0.110% |
| 197 | 12.715 | 12.700 | 12.734 | VV | 323 | 4600 | 0.13% | 0.047% |
| 198 | 12.768 | 12.734 | 12.788 | VV | 342 | 8460 | 0.24% | 0.087% |
| 199 | 12.838 | 12.788 | 12.978 | VV | 280974 | 3506755 | 100.00% | 36.001% |
| 200 | 13.002 | 12.978 | 13.044 | VV | 889 | 28513 | 0.81% | 0.293% |
| 201 | 13.069 | 13.044 | 13.098 | VV | 744 | 19554 | 0.56% | 0.201% |
| 202 | 13.122 | 13.098 | 13.176 | VV | 575 | 21945 | 0.63% | 0.225% |
| 203 | 13.202 | 13.176 | 13.241 | VV | 657 | 21451 | 0.61% | 0.220% |
| 204 | 13.288 | 13.241 | 13.320 | VV | 868 | 28792 | 0.82% | 0.296% |
| 205 | 13.353 | 13.320 | 13.368 | VV | 400 | 9724 | 0.28% | 0.100% |
| 206 | 13.460 | 13.368 | 13.487 | VV | 534 | 28682 | 0.82% | 0.294% |
| 207 | 13.540 | 13.487 | 13.566 | VV | 1452 | 32924 | 0.94% | 0.338% |
| 208 | 13.592 | 13.566 | 13.644 | VV | 2910 | 50512 | 1.44% | 0.519% |
| 209 | 13.650 | 13.644 | 13.664 | VV | 309 | 3552 | 0.10% | 0.036% |
| 210 | 13.672 | 13.664 | 13.720 | VV | 329 | 7701 | 0.22% | 0.079% |
| 211 | 13.730 | 13.720 | 13.771 | VV | 239 | 5007 | 0.14% | 0.051% |
| 212 | 13.842 | 13.771 | 13.861 | VV | 337 | 13353 | 0.38% | 0.137% |
| 213 | 13.884 | 13.861 | 13.914 | VV | 319 | 7876 | 0.22% | 0.081% |
| 214 | 13.948 | 13.914 | 13.983 | VV | 276 | 8994 | 0.26% | 0.092% |
| 215 | 14.031 | 13.983 | 14.071 | VV | 842 | 23602 | 0.67% | 0.242% |
| 216 | 14.082 | 14.071 | 14.102 | VV | 395 | 5992 | 0.17% | 0.062% |
| 217 | 14.155 | 14.102 | 14.192 | VV | 649 | 19244 | 0.55% | 0.198% |
| 218 | 14.209 | 14.192 | 14.217 | VV | 299 | 3933 | 0.11% | 0.040% |
| 219 | 14.237 | 14.217 | 14.254 | VV | 338 | 6995 | 0.20% | 0.072% |
| 220 | 14.269 | 14.254 | 14.291 | VV | 443 | 8455 | 0.24% | 0.087% |
| 221 | 14.297 | 14.291 | 14.373 | VV | 489 | 16908 | 0.48% | 0.174% |
| 222 | 14.401 | 14.373 | 14.411 | VV | 410 | 7547 | 0.22% | 0.077% |
| 223 | 14.419 | 14.411 | 14.429 | VV | 351 | 3567 | 0.10% | 0.037% |
| 224 | 14.464 | 14.429 | 14.491 | VV | 522 | 15412 | 0.44% | 0.158% |
| 225 | 14.501 | 14.491 | 14.521 | VV | 512 | 6804 | 0.19% | 0.070% |
| 226 | 14.543 | 14.521 | 14.584 | VV | 338 | 8288 | 0.24% | 0.085% |
| 227 | 14.612 | 14.584 | 14.622 | VV | 265 | 4831 | 0.14% | 0.050% |
| 228 | 14.649 | 14.622 | 14.670 | VV | 1192 | 20158 | 0.57% | 0.207% |
| 229 | 14.694 | 14.670 | 14.828 | VV | 2711 | 53078 | 1.51% | 0.545% |
| 230 | 14.863 | 14.828 | 14.898 | PV | 237 | 5409 | 0.15% | 0.056% |
| 231 | 14.922 | 14.898 | 14.938 | VV | 94 | 1970 | 0.06% | 0.020% |
| 232 | 14.939 | 14.938 | 14.984 | VV | 150 | 1058 | 0.03% | 0.011% |
| 233 | 15.001 | 14.984 | 15.064 | PV | 101 | 2302 | 0.07% | 0.024% |
| 234 | 15.072 | 15.064 | 15.078 | VV | 96 | 548 | 0.02% | 0.006% |
| 235 | 15.124 | 15.078 | 15.151 | VV | 195 | 5248 | 0.15% | 0.054% |
| 236 | 15.158 | 15.151 | 15.167 | VV | 142 | 1143 | 0.03% | 0.012% |
| 237 | 15.214 | 15.167 | 15.300 | VV | 1027 | 22629 | 0.65% | 0.232% |
| 238 | 15.331 | 15.300 | 15.340 | VV | 190 | 3187 | 0.09% | 0.033% |
| 239 | 15.355 | 15.340 | 15.390 | VV | 313 | 6510 | 0.19% | 0.067% |
| 240 | 15.410 | 15.390 | 15.429 | VV | 318 | 5065 | 0.14% | 0.052% |
| 241 | 15.435 | 15.429 | 15.441 | VV | 206 | 1439 | 0.04% | 0.015% |
| 242 | 15.448 | 15.441 | 15.474 | VV | 234 | 2994 | 0.09% | 0.031% |
| 243 | 15.534 | 15.474 | 15.548 | VV | 347 | 11701 | 0.33% | 0.120% |
| 244 | 15.566 | 15.548 | 15.634 | VV | 428 | 13293 | 0.38% | 0.136% |
| 245 | 15.674 | 15.634 | 15.691 | VV | 901 | 14657 | 0.42% | 0.150% |
| 246 | 15.713 | 15.691 | 15.818 | VV | 2592 | 52376 | 1.49% | 0.538% |

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|---|---|---|---|---|---|---|---|---|
| 247 | 15.827 | 15.818 | 15.868 | VV | 112 | 2044 | 0.06% | 0.021% |
| 248 | 15.887 | 15.868 | 15.950 | VV | 163 | 4359 | 0.12% | 0.045% |
| 249 | 15.961 | 15.950 | 16.000 | PV | 80 | 1416 | 0.04% | 0.015% |
| 250 | 16.013 | 16.000 | 16.031 | VV | 100 | 1279 | 0.04% | 0.013% |
| 251 | 16.058 | 16.031 | 16.091 | VV | 119 | 3145 | 0.09% | 0.032% |
| 252 | 16.095 | 16.091 | 16.106 | VV | 163 | 639 | 0.02% | 0.007% |
| 253 | 16.133 | 16.106 | 16.163 | VV | 106 | 2777 | 0.08% | 0.029% |
| 254 | 16.196 | 16.163 | 16.268 | VV | 1344 | 27810 | 0.79% | 0.286% |
| 255 | 16.278 | 16.268 | 16.298 | VV | 149 | 2164 | 0.06% | 0.022% |
| 256 | 16.306 | 16.298 | 16.330 | VV | 150 | 2481 | 0.07% | 0.025% |
| 257 | 16.362 | 16.330 | 16.384 | VV | 275 | 6421 | 0.18% | 0.066% |
| 258 | 16.388 | 16.384 | 16.412 | VV | 270 | 3216 | 0.09% | 0.033% |
| 259 | 16.488 | 16.412 | 16.525 | VV | 238 | 12111 | 0.35% | 0.124% |
| 260 | 16.551 | 16.525 | 16.572 | VV | 292 | 6496 | 0.19% | 0.067% |
| 261 | 16.583 | 16.572 | 16.598 | VV | 361 | 4013 | 0.11% | 0.041% |
| 262 | 16.625 | 16.598 | 16.638 | VV | 820 | 12376 | 0.35% | 0.127% |
| 263 | 16.662 | 16.638 | 16.723 | VV | 2644 | 48599 | 1.39% | 0.499% |
| 264 | 16.737 | 16.723 | 16.792 | VV | 175 | 5861 | 0.17% | 0.060% |
| 265 | 16.801 | 16.792 | 16.824 | VV | 167 | 1867 | 0.05% | 0.019% |
| 266 | 16.834 | 16.824 | 16.881 | VV | 112 | 1542 | 0.04% | 0.016% |
| 267 | 16.902 | 16.881 | 16.924 | PV | 73 | 650 | 0.02% | 0.007% |
| 268 | 16.958 | 16.924 | 16.981 | VV | 285 | 4977 | 0.14% | 0.051% |
| 269 | 17.000 | 16.981 | 17.014 | VV | 156 | 2418 | 0.07% | 0.025% |
| 270 | 17.044 | 17.014 | 17.054 | VV | 155 | 2389 | 0.07% | 0.025% |
| 271 | 17.111 | 17.054 | 17.146 | PV | 2126 | 37210 | 1.06% | 0.382% |
| 272 | 17.162 | 17.146 | 17.171 | VV | 153 | 2221 | 0.06% | 0.023% |
| 273 | 17.211 | 17.171 | 17.274 | VV | 235 | 10135 | 0.29% | 0.104% |
| 274 | 17.292 | 17.274 | 17.344 | VV | 262 | 7289 | 0.21% | 0.075% |
| 275 | 17.391 | 17.344 | 17.412 | VV | 314 | 8765 | 0.25% | 0.090% |
| 276 | 17.434 | 17.412 | 17.474 | VV | 248 | 5941 | 0.17% | 0.061% |
| 277 | 17.548 | 17.474 | 17.602 | VV | 3197 | 66642 | 1.90% | 0.684% |
| 278 | 17.648 | 17.602 | 17.684 | VV | 410 | 12598 | 0.36% | 0.129% |
| 279 | 17.697 | 17.684 | 17.781 | VV | 240 | 6321 | 0.18% | 0.065% |
| 280 | 17.823 | 17.781 | 17.844 | PV | 352 | 5309 | 0.15% | 0.055% |
| 281 | 17.858 | 17.844 | 17.896 | VV | 133 | 2369 | 0.07% | 0.024% |
| 282 | 17.969 | 17.896 | 18.015 | PV | 2641 | 42622 | 1.22% | 0.438% |
| 283 | 18.069 | 18.015 | 18.094 | VV | 132 | 4217 | 0.12% | 0.043% |
| 284 | 18.100 | 18.094 | 18.118 | VV | 120 | 948 | 0.03% | 0.010% |
| 285 | 18.138 | 18.118 | 18.178 | VV | 149 | 2528 | 0.07% | 0.026% |
| 286 | 18.196 | 18.178 | 18.201 | VV | 122 | 985 | 0.03% | 0.010% |
| 287 | 18.228 | 18.201 | 18.246 | VV | 308 | 5083 | 0.14% | 0.052% |
| 288 | 18.250 | 18.246 | 18.265 | VV | 224 | 2024 | 0.06% | 0.021% |
| 289 | 18.274 | 18.265 | 18.288 | VV | 125 | 1516 | 0.04% | 0.016% |
| 290 | 18.311 | 18.288 | 18.320 | VV | 148 | 2402 | 0.07% | 0.025% |
| 291 | 18.379 | 18.320 | 18.454 | VV | 3021 | 62262 | 1.78% | 0.639% |
| 292 | 18.522 | 18.454 | 18.531 | VV | 190 | 5780 | 0.16% | 0.059% |
| 293 | 18.545 | 18.531 | 18.574 | VV | 172 | 2763 | 0.08% | 0.028% |
| 294 | 18.581 | 18.574 | 18.589 | VV | 126 | 897 | 0.03% | 0.009% |
| 295 | 18.601 | 18.589 | 18.611 | VV | 124 | 1097 | 0.03% | 0.011% |
| 296 | 18.636 | 18.611 | 18.653 | VV | 244 | 3552 | 0.10% | 0.036% |
| 297 | 18.678 | 18.653 | 18.705 | PV | 166 | 2574 | 0.07% | 0.026% |
| 298 | 18.777 | 18.705 | 18.830 | VV | 1838 | 33033 | 0.94% | 0.339% |
| 299 | 18.912 | 18.830 | 18.921 | VV | 133 | 5169 | 0.15% | 0.053% |

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| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 300 | 18.952 | 18.921 | 18.985 | VV | 239 | 5587 | 0.16% | 0.057% |
| 301 | 19.097 | 18.985 | 19.113 | VV | 265 | 14526 | 0.41% | 0.149% |
| 302 | 19.162 | 19.113 | 19.196 | VV | 2346 | 47405 | 1.35% | 0.487% |
| 303 | 19.205 | 19.196 | 19.228 | VV | 341 | 5258 | 0.15% | 0.054% |
| 304 | 19.465 | 19.228 | 19.509 | VV | 3199 | 203473 | 5.80% | 2.089% |
| 305 | 19.536 | 19.509 | 19.634 | VV | 2765 | 100913 | 2.88% | 1.036% |
| 306 | 19.656 | 19.634 | 19.665 | VV | 701 | 11707 | 0.33% | 0.120% |
| 307 | 19.793 | 19.665 | 19.828 | VV | 1094 | 79440 | 2.27% | 0.816% |
| 308 | 19.901 | 19.828 | 19.941 | VV | 2792 | 98359 | 2.80% | 1.010% |
| 309 | 19.963 | 19.941 | 20.007 | VV | 1360 | 51501 | 1.47% | 0.529% |
| 310 | 20.257 | 20.007 | 20.294 | VV | 2407 | 276782 | 7.89% | 2.842% |
| 311 | 20.435 | 20.294 | 20.454 | VV | 2602 | 217166 | 6.19% | 2.229% |
| 312 | 20.611 | 20.454 | 20.668 | VV | 3752 | 349273 | 9.96% | 3.586% |
| 313 | 20.685 | 20.668 | 20.701 | VV | 2492 | 50061 | 1.43% | 0.514% |
| 314 | 20.709 | 20.701 | 20.714 | VV | 2449 | 18502 | 0.53% | 0.190% |
| 315 | 20.721 | 20.714 | 20.729 | VV | 2462 | 21627 | 0.62% | 0.222% |
| 316 | 20.763 | 20.729 | 20.803 | VV | 2457 | 104661 | 2.98% | 1.074% |
| 317 | 20.812 | 20.803 | 20.851 | VV | 2318 | 64007 | 1.83% | 0.657% |
| 318 | 20.867 | 20.851 | 20.888 | VV | 2239 | 47215 | 1.35% | 0.485% |
| 319 | 20.895 | 20.888 | 20.908 | VV | 2136 | 25121 | 0.72% | 0.258% |
| 320 | 20.921 | 20.908 | 20.971 | VV | 2189 | 77230 | 2.20% | 0.793% |
| 321 | 21.012 | 20.971 | 21.041 | VV | 2126 | 83702 | 2.39% | 0.859% |
| 322 | 21.078 | 21.041 | 21.099 | VV | 1846 | 62887 | 1.79% | 0.646% |
| 323 | 21.259 | 21.099 | 21.291 | VV | 1757 | 201405 | 5.74% | 2.068% |
| 324 | 21.300 | 21.291 | 21.331 | VV | 1718 | 39951 | 1.14% | 0.410% |
| 325 | 21.359 | 21.331 | 21.378 | VV | 1604 | 44425 | 1.27% | 0.456% |
| 326 | 21.466 | 21.378 | 21.511 | VV | 2317 | 139474 | 3.98% | 1.432% |
| 327 | 21.533 | 21.511 | 21.590 | VV | 1459 | 64137 | 1.83% | 0.658% |
| 328 | 21.749 | 21.590 | 21.924 | VV | 1144 | 199893 | 5.70% | 2.052% |
| 329 | 21.950 | 21.924 | 22.191 | VV | 671 | 62383 | 1.78% | 0.640% |

Sum of corrected areas: 9740582

Aliphatic EPH 021125.M Sat Mar 01 01:33:00 2025

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Weston Solutions, Inc. | Date Collected: | 02/24/25 |
| Project: | RFP 905 | Date Received: | 02/24/25 |
| Client Sample ID: | P001-CLAY-CF02-01 | SDG No.: | Q1421 |
| Lab Sample ID: | Q1421-09 | Matrix: | Solid |
| Analytical Method: | NJEPH | % Solid: | 78.4 |
| Sample Wt/Vol: | 30.02 Units: g | Final Vol: | 2000 uL |
| Soil Aliquot Vol: | uL | Test: | EPH |
| Prep Method : | | | |

| File ID : | Dilution: | Prep Date : | Date Analyzed : | Prep Batch ID |
|---|---|---|---|---|
| FD049144.D | 1 | 02/27/25 | 02/28/25 | PB166923 |

| CAS Number | Parameter | | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | |
| Aromatic C10-C12 | Aromatic C10-C12 | | 0.38 | U | 0.38 | 0.85 | mg/kg |
| Aromatic C12-C16 | Aromatic C12-C16 | | 0.45 | J | 0.43 | 1.27 | mg/kg |
| Aromatic C16-C21 | Aromatic C16-C21 | | 1.67 | J | 1.22 | 2.12 | mg/kg |
| Aromatic C21-C36 | Aromatic C21-C36 | | 2.55 | U | 2.55 | 3.40 | mg/kg |
| **SURROGATES** | | | | | | | |
| 580-13-2 | 2-Bromonaphthalene (SURR) | | 49.8 | | 40 - 140 | 100% | SPK: 50 |
| 321-60-8 | 2-Flurobiphenyl (SURR) | | 52.4 | | 40 - 140 | 105% | SPK: 50 |
| 84-15-1 | ortho-Terphenyl (SURR) | | 24.2 | | 40 - 140 | 48% | SPK: 50 |

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

# Quantitation Report For Aromatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | Q1421-09 | Acq On: | 28 Feb 2025 20:09 |
| Client Sample ID: | P001-CLAY-CF02-01 | Operator: | YP/AJ |
| Data file: | FD049144.D | Misc: | |
| Instrument: | FID_D | ALS Vial: | 73 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aromatic C10-C12 | 4.076 | 5.794 | 505124 | 3.176 | 200 | ug/ml |
| Aromatic C12-C16 | 5.795 | 8.396 | 851814 | 5.293 | 300 | ug/ml |
| Aromatic C16-C21 | 8.397 | 12.661 | 3018801 | 19.684 | 500 | ug/ml |
| Aromatic C21-C36 | 12.662 | 18.073 | 3101568 | 21.672 | 800 | ug/ml |
| Aromatic EPH | 4.076 | 18.073 | 7477307 | 49.826 | | ug/ml |
| 2-Bromonaphthalene (SURR) | 7.351 | 7.351 | 7126244 | 49.8 | | ug/ml |
| 2-Flurobiphenyl (SURR) | 8.201 | 8.201 | 4606351 | 52.4 | | ug/ml |
| ortho-Terphenyl (SURR) | 11.233 | 11.233 | 3917944 | 24.22 | | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022825AR\
Data File : FD049144.D
Signal(s) : FID2B.ch
Acq On : 28 Feb 2025 20:09
Operator : YP/AJ
Sample : Q1421-09
Misc :
ALS Vial : 73 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF02-01

Integration File: autoint1.e
Quant Time: Mar 01 02:22:13 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

| Compound | R.T. | Response | Conc Units |
|---|---|---|---|
| System Monitoring Compounds | | | |
| 4) S 2-Bromonaphthalene (S... | 7.351 | 7126244 | 49.796 ug/ml |
| Spiked Amount 50.000 | | Recovery = | 99.59% |
| 6) S 2-Flurobiphenyl (SURR) | 8.201 | 4606351 | 52.397 ug/ml |
| Spiked Amount 50.000 | Range 0 - 131 | Recovery = | 104.79% |
| 11) S ortho-Terphenyl (SURR) | 11.233 | 3917944 | 24.219 ug/ml |
| Spiked Amount 50.000 | | Recovery = | 48.44% |
| Target Compounds | | | |

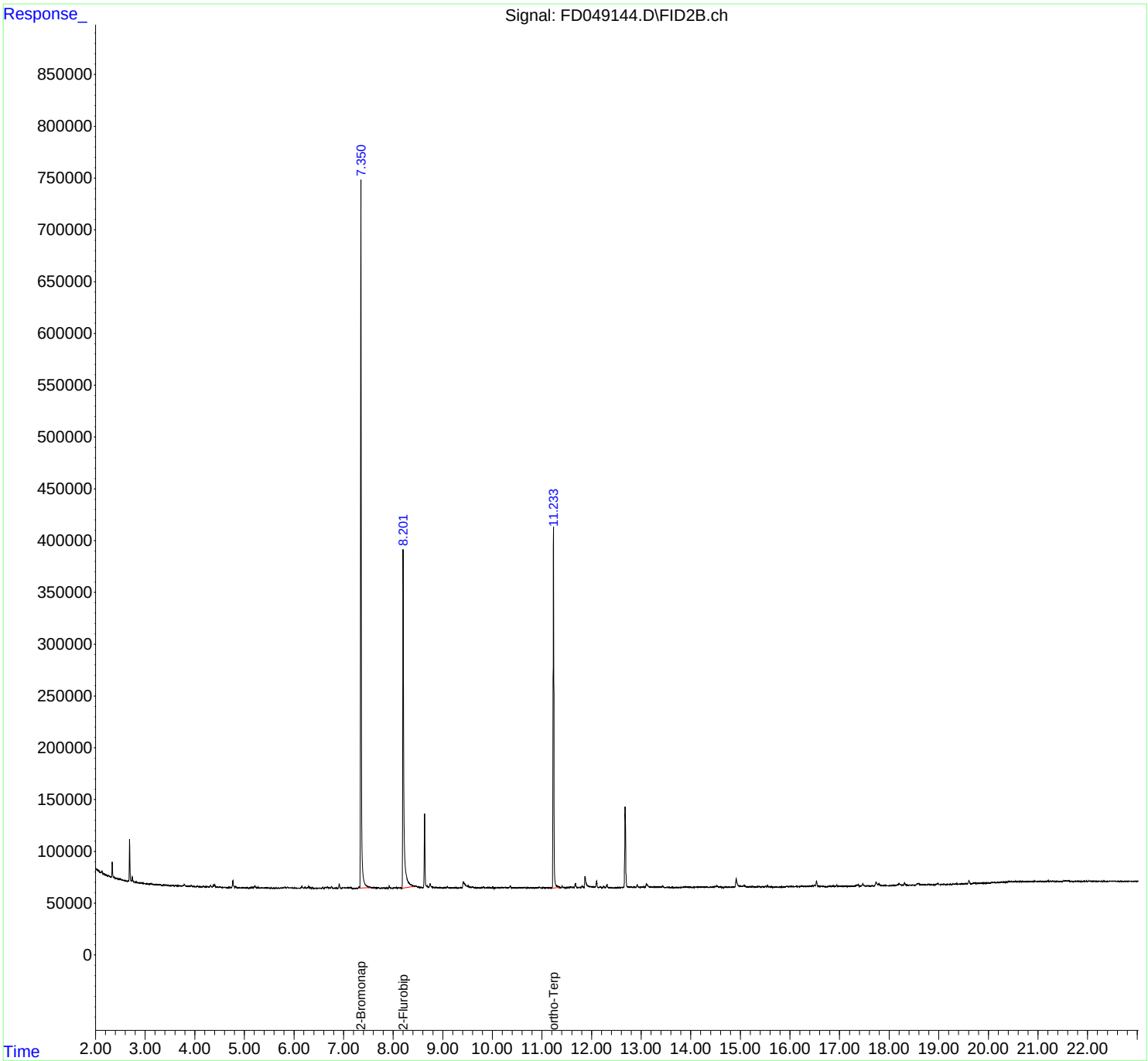
(f)=RT Delta > 1/2 Window (m)=manual int.

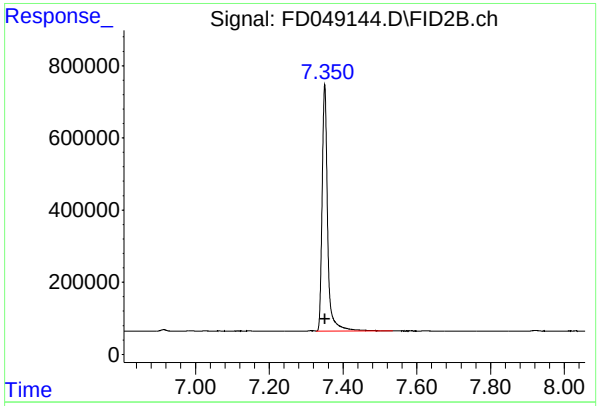
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022825AR\
Data File : FD049144.D
Signal(s) : FID2B.ch
Acq On : 28 Feb 2025 20:09
Operator : YP/AJ
Sample : Q1421-09
Misc :
ALS Vial : 73 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF02-01

Integration File: autoint1.e
Quant Time: Mar 01 02:22:13 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

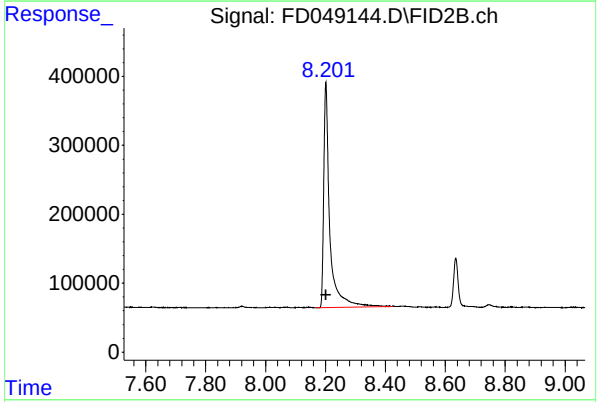





#4 2-Bromonaphthalene (SURR)

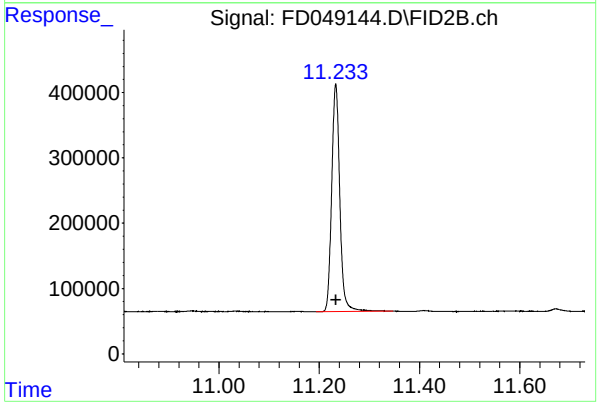
R.T.: 7.351 min
Delta R.T.: 0.000 min
Response: 7126244
Conc: 49.80 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF02-01




#6 2-Flurobiphenyl (SURR)

R.T.: 8.201 min
Delta R.T.: 0.000 min
Response: 4606351
Conc: 52.40 ug/ml




#11 ortho-Terphenyl (SURR)

R.T.: 11.233 min
Delta R.T.: 0.000 min
Response: 3917944
Conc: 24.22 ug/ml

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022825AR\
Data File : FD049144.D
Signal(s) : FID2B.ch
Acq On : 28 Feb 2025 20:09
Sample : Q1421-09
Misc :
ALS Vial : 73 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Title : GC Extractables

Signal : FID2B.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 4.059 | 4.042 | 4.064 | BV | 154 | 1228 | 0.02% | 0.005% |
| 2 | 4.085 | 4.080 | 4.145 | VV | 328 | 3649 | 0.05% | 0.016% |
| 3 | 4.169 | 4.145 | 4.219 | PV | 1130 | 21400 | 0.30% | 0.092% |
| 4 | 4.234 | 4.219 | 4.242 | VV | 374 | 3858 | 0.05% | 0.017% |
| 5 | 4.260 | 4.242 | 4.281 | VV | 571 | 8541 | 0.12% | 0.037% |
| 6 | 4.317 | 4.281 | 4.354 | VV | 2165 | 32726 | 0.46% | 0.140% |
| 7 | 4.373 | 4.354 | 4.385 | VV | 2093 | 23180 | 0.32% | 0.099% |
| 8 | 4.401 | 4.385 | 4.450 | VV | 2986 | 45433 | 0.63% | 0.194% |
| 9 | 4.455 | 4.450 | 4.478 | VV | 441 | 3354 | 0.05% | 0.014% |
| 10 | 4.512 | 4.478 | 4.569 | VV | 716 | 19579 | 0.27% | 0.084% |
| 11 | 4.581 | 4.569 | 4.611 | PV | 472 | 7476 | 0.10% | 0.032% |
| 12 | 4.615 | 4.611 | 4.622 | VV | 327 | 1612 | 0.02% | 0.007% |
| 13 | 4.635 | 4.622 | 4.654 | VV | 362 | 3805 | 0.05% | 0.016% |
| 14 | 4.690 | 4.654 | 4.701 | VV | 602 | 7755 | 0.11% | 0.033% |
| 15 | 4.710 | 4.701 | 4.720 | VV | 338 | 2710 | 0.04% | 0.012% |
| 16 | 4.733 | 4.720 | 4.740 | VV | 383 | 2663 | 0.04% | 0.011% |
| 17 | 4.769 | 4.740 | 4.812 | VV | 7080 | 100608 | 1.40% | 0.431% |
| 18 | 4.828 | 4.812 | 4.866 | VV | 1556 | 23019 | 0.32% | 0.099% |
| 19 | 4.901 | 4.866 | 4.917 | VV | 311 | 5648 | 0.08% | 0.024% |
| 20 | 4.927 | 4.917 | 4.934 | VV | 497 | 2630 | 0.04% | 0.011% |
| 21 | 4.940 | 4.934 | 4.952 | VV | 298 | 1520 | 0.02% | 0.007% |
| 22 | 4.964 | 4.952 | 4.995 | VV | 401 | 6990 | 0.10% | 0.030% |
| 23 | 5.002 | 4.995 | 5.026 | PV | 305 | 2569 | 0.04% | 0.011% |
| 24 | 5.034 | 5.026 | 5.056 | VV | 230 | 2598 | 0.04% | 0.011% |
| 25 | 5.062 | 5.056 | 5.072 | VV | 496 | 1869 | 0.03% | 0.008% |
| 26 | 5.082 | 5.072 | 5.102 | VV | 271 | 1971 | 0.03% | 0.008% |
| 27 | 5.139 | 5.102 | 5.157 | PV | 790 | 16115 | 0.22% | 0.069% |
| 28 | 5.170 | 5.157 | 5.178 | VV | 722 | 7032 | 0.10% | 0.030% |
| 29 | 5.215 | 5.178 | 5.260 | VV | 2582 | 53066 | 0.74% | 0.227% |
| 30 | 5.274 | 5.260 | 5.298 | VV | 952 | 13995 | 0.19% | 0.060% |
| 31 | 5.305 | 5.298 | 5.327 | VV | 465 | 5241 | 0.07% | 0.022% |
| 32 | 5.335 | 5.327 | 5.365 | VV | 431 | 7932 | 0.11% | 0.034% |
| 33 | 5.372 | 5.365 | 5.415 | VV | 500 | 10756 | 0.15% | 0.046% |
| 34 | 5.419 | 5.415 | 5.430 | VV | 484 | 3175 | 0.04% | 0.014% |
| 35 | 5.436 | 5.430 | 5.442 | VV | 373 | 2291 | 0.03% | 0.010% |
| 36 | 5.444 | 5.442 | 5.454 | VV | 437 | 2437 | 0.03% | 0.010% |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 37 | 5.469 | 5.454 | 5.480 | VV | 541 | 6506 | 0.09% | 0.028% |
| 38 | 5.484 | 5.480 | 5.495 | VV | 370 | 2507 | 0.03% | 0.011% |
| 39 | 5.502 | 5.495 | 5.529 | VV | 300 | 4379 | 0.06% | 0.019% |
| 40 | 5.537 | 5.529 | 5.554 | VV | 345 | 2546 | 0.04% | 0.011% |
| 41 | 5.577 | 5.559 | 5.592 | VV | 332 | 2972 | 0.04% | 0.013% |
| 42 | 5.597 | 5.592 | 5.610 | VV | 208 | 1228 | 0.02% | 0.005% |
| 43 | 5.643 | 5.638 | 5.660 | VV | 373 | 1813 | 0.03% | 0.008% |
| 44 | 5.690 | 5.660 | 5.717 | VV | 424 | 7717 | 0.11% | 0.033% |
| 45 | 5.729 | 5.717 | 5.748 | VV | 316 | 5094 | 0.07% | 0.022% |
| 46 | 5.777 | 5.748 | 5.793 | VV | 665 | 11159 | 0.16% | 0.048% |
| 47 | 5.817 | 5.793 | 5.855 | VV | 1151 | 24265 | 0.34% | 0.104% |
| 48 | 5.869 | 5.855 | 5.899 | VV | 1507 | 21644 | 0.30% | 0.093% |
| 49 | 5.902 | 5.899 | 5.913 | VV | 437 | 3500 | 0.05% | 0.015% |
| 50 | 5.921 | 5.913 | 5.927 | VV | 619 | 4129 | 0.06% | 0.018% |
| 51 | 5.942 | 5.927 | 5.964 | VV | 736 | 11501 | 0.16% | 0.049% |
| 52 | 5.973 | 5.964 | 5.992 | VV | 361 | 4611 | 0.06% | 0.020% |
| 53 | 6.010 | 5.992 | 6.035 | VV | 407 | 6880 | 0.10% | 0.029% |
| 54 | 6.040 | 6.035 | 6.045 | VV | 334 | 1300 | 0.02% | 0.006% |
| 55 | 6.051 | 6.045 | 6.070 | VV | 312 | 2906 | 0.04% | 0.012% |
| 56 | 6.083 | 6.078 | 6.090 | VV | 306 | 1676 | 0.02% | 0.007% |
| 57 | 6.095 | 6.090 | 6.113 | VV | 303 | 2216 | 0.03% | 0.009% |
| 58 | 6.157 | 6.113 | 6.209 | VV | 1626 | 40010 | 0.56% | 0.171% |
| 59 | 6.223 | 6.209 | 6.247 | VV | 1327 | 17060 | 0.24% | 0.073% |
| 60 | 6.264 | 6.247 | 6.278 | VV | 848 | 9109 | 0.13% | 0.039% |
| 61 | 6.294 | 6.278 | 6.314 | VV | 1781 | 25208 | 0.35% | 0.108% |
| 62 | 6.321 | 6.314 | 6.347 | VV | 804 | 11308 | 0.16% | 0.048% |
| 63 | 6.368 | 6.347 | 6.396 | VV | 1022 | 13778 | 0.19% | 0.059% |
| 64 | 6.414 | 6.396 | 6.428 | VV | 357 | 4112 | 0.06% | 0.018% |
| 65 | 6.434 | 6.428 | 6.442 | VV | 378 | 1883 | 0.03% | 0.008% |
| 66 | 6.451 | 6.442 | 6.472 | VV | 304 | 3290 | 0.05% | 0.014% |
| 67 | 6.504 | 6.472 | 6.512 | VV | 359 | 5633 | 0.08% | 0.024% |
| 68 | 6.513 | 6.512 | 6.535 | VV | 317 | 3172 | 0.04% | 0.014% |
| 69 | 6.541 | 6.535 | 6.553 | VV | 442 | 2765 | 0.04% | 0.012% |
| 70 | 6.580 | 6.563 | 6.605 | PV | 1265 | 14504 | 0.20% | 0.062% |
| 71 | 6.632 | 6.605 | 6.657 | VV | 1233 | 24363 | 0.34% | 0.104% |
| 72 | 6.679 | 6.657 | 6.697 | VV | 1543 | 25653 | 0.36% | 0.110% |
| 73 | 6.707 | 6.697 | 6.733 | VV | 1020 | 14555 | 0.20% | 0.062% |
| 74 | 6.758 | 6.733 | 6.782 | VV | 2116 | 31417 | 0.44% | 0.134% |
| 75 | 6.789 | 6.782 | 6.801 | VV | 336 | 3323 | 0.05% | 0.014% |
| 76 | 6.806 | 6.801 | 6.820 | VV | 351 | 2788 | 0.04% | 0.012% |
| 77 | 6.832 | 6.820 | 6.838 | VV | 395 | 3043 | 0.04% | 0.013% |
| 78 | 6.857 | 6.838 | 6.874 | VV | 580 | 7774 | 0.11% | 0.033% |
| 79 | 6.914 | 6.874 | 6.948 | VV | 4604 | 56805 | 0.79% | 0.243% |
| 80 | 6.982 | 6.948 | 7.010 | VV | 1055 | 22980 | 0.32% | 0.098% |
| 81 | 7.026 | 7.010 | 7.057 | VV | 1212 | 21268 | 0.30% | 0.091% |
| 82 | 7.062 | 7.057 | 7.083 | VV | 967 | 10745 | 0.15% | 0.046% |
| 83 | 7.115 | 7.083 | 7.120 | VV | 892 | 13981 | 0.19% | 0.060% |
| 84 | 7.124 | 7.120 | 7.132 | VV | 834 | 4617 | 0.06% | 0.020% |
| 85 | 7.146 | 7.132 | 7.179 | VV | 1080 | 15062 | 0.21% | 0.064% |
| 86 | 7.186 | 7.179 | 7.206 | VV | 173 | 1919 | 0.03% | 0.008% |
| 87 | 7.213 | 7.206 | 7.244 | VV | 236 | 3286 | 0.05% | 0.014% |
| 88 | 7.262 | 7.244 | 7.288 | VV | 326 | 4918 | 0.07% | 0.021% |
| 89 | 7.314 | 7.288 | 7.327 | PV | 1767 | 21470 | 0.30% | 0.092% |

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| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 90 | 7.351 | 7.327 | 7.512 | VV | 683235 | 7190953 | 100.00% | 30.784% |
| 91 | 7.518 | 7.512 | 7.536 | VV | 1415 | 18422 | 0.26% | 0.079% |
| 92 | 7.540 | 7.536 | 7.572 | VV | 1071 | 19155 | 0.27% | 0.082% |
| 93 | 7.580 | 7.572 | 7.597 | VV | 988 | 12248 | 0.17% | 0.052% |
| 94 | 7.598 | 7.597 | 7.610 | VV | 818 | 5132 | 0.07% | 0.022% |
| 95 | 7.624 | 7.610 | 7.645 | VV | 1149 | 17868 | 0.25% | 0.076% |
| 96 | 7.648 | 7.645 | 7.662 | VV | 507 | 4364 | 0.06% | 0.019% |
| 97 | 7.684 | 7.662 | 7.688 | VV | 548 | 6399 | 0.09% | 0.027% |
| 98 | 7.695 | 7.688 | 7.701 | VV | 501 | 3481 | 0.05% | 0.015% |
| 99 | 7.712 | 7.701 | 7.743 | VV | 668 | 11846 | 0.16% | 0.051% |
| 100 | 7.749 | 7.743 | 7.759 | VV | 377 | 2996 | 0.04% | 0.013% |
| 101 | 7.763 | 7.759 | 7.770 | VV | 404 | 2137 | 0.03% | 0.009% |
| 102 | 7.808 | 7.770 | 7.823 | VV | 462 | 9336 | 0.13% | 0.040% |
| 103 | 7.835 | 7.823 | 7.850 | VV | 464 | 5540 | 0.08% | 0.024% |
| 104 | 7.862 | 7.850 | 7.875 | VV | 475 | 4503 | 0.06% | 0.019% |
| 105 | 7.877 | 7.875 | 7.886 | VV | 502 | 2014 | 0.03% | 0.009% |
| 106 | 7.892 | 7.886 | 7.896 | VV | 426 | 1739 | 0.02% | 0.007% |
| 107 | 7.921 | 7.896 | 7.940 | VV | 2483 | 31039 | 0.43% | 0.133% |
| 108 | 7.946 | 7.940 | 7.987 | VV | 728 | 11389 | 0.16% | 0.049% |
| 109 | 8.013 | 7.987 | 8.023 | VV | 867 | 10754 | 0.15% | 0.046% |
| 110 | 8.031 | 8.023 | 8.050 | VV | 865 | 10096 | 0.14% | 0.043% |
| 111 | 8.069 | 8.050 | 8.086 | VV | 1006 | 14242 | 0.20% | 0.061% |
| 112 | 8.111 | 8.086 | 8.133 | VV | 841 | 13718 | 0.19% | 0.059% |
| 113 | 8.146 | 8.133 | 8.168 | VV | 998 | 11708 | 0.16% | 0.050% |
| 114 | 8.201 | 8.168 | 8.365 | VV | 326790 | 4689400 | 65.21% | 20.075% |
| 115 | 8.369 | 8.365 | 8.426 | VV | 3408 | 95261 | 1.32% | 0.408% |
| 116 | 8.430 | 8.426 | 8.442 | VV | 2252 | 20430 | 0.28% | 0.087% |
| 117 | 8.457 | 8.442 | 8.501 | VV | 2497 | 67859 | 0.94% | 0.290% |
| 118 | 8.517 | 8.501 | 8.539 | VV | 1467 | 26743 | 0.37% | 0.114% |
| 119 | 8.566 | 8.539 | 8.588 | VV | 1355 | 29638 | 0.41% | 0.127% |
| 120 | 8.592 | 8.588 | 8.596 | VV | 736 | 3601 | 0.05% | 0.015% |
| 121 | 8.635 | 8.596 | 8.719 | VV | 72186 | 834278 | 11.60% | 3.571% |
| 122 | 8.746 | 8.719 | 8.805 | VV | 4653 | 101550 | 1.41% | 0.435% |
| 123 | 8.821 | 8.805 | 8.844 | VV | 1303 | 21352 | 0.30% | 0.091% |
| 124 | 8.873 | 8.844 | 8.918 | VV | 1203 | 33401 | 0.46% | 0.143% |
| 125 | 8.932 | 8.918 | 8.942 | VV | 823 | 8570 | 0.12% | 0.037% |
| 126 | 8.948 | 8.942 | 8.963 | VV | 743 | 8238 | 0.11% | 0.035% |
| 127 | 8.968 | 8.963 | 8.997 | VV | 711 | 9450 | 0.13% | 0.040% |
| 128 | 9.027 | 8.997 | 9.032 | VV | 861 | 13350 | 0.19% | 0.057% |
| 129 | 9.035 | 9.032 | 9.072 | VV | 849 | 12155 | 0.17% | 0.052% |
| 130 | 9.093 | 9.072 | 9.150 | VV | 1569 | 33118 | 0.46% | 0.142% |
| 131 | 9.153 | 9.150 | 9.160 | VV | 315 | 2004 | 0.03% | 0.009% |
| 132 | 9.177 | 9.160 | 9.193 | VV | 507 | 7799 | 0.11% | 0.033% |
| 133 | 9.206 | 9.193 | 9.210 | VV | 421 | 3894 | 0.05% | 0.017% |
| 134 | 9.214 | 9.210 | 9.219 | VV | 522 | 1896 | 0.03% | 0.008% |
| 135 | 9.224 | 9.219 | 9.229 | VV | 402 | 1918 | 0.03% | 0.008% |
| 136 | 9.242 | 9.229 | 9.283 | VV | 866 | 15382 | 0.21% | 0.066% |
| 137 | 9.287 | 9.283 | 9.290 | VV | 432 | 1614 | 0.02% | 0.007% |
| 138 | 9.296 | 9.290 | 9.309 | VV | 472 | 4491 | 0.06% | 0.019% |
| 139 | 9.312 | 9.309 | 9.319 | VV | 453 | 2199 | 0.03% | 0.009% |
| 140 | 9.337 | 9.319 | 9.348 | VV | 642 | 7987 | 0.11% | 0.034% |
| 141 | 9.361 | 9.348 | 9.383 | VV | 848 | 12455 | 0.17% | 0.053% |

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|---|---|---|---|---|---|---|---|---|
| 142 | 9.388 | 9.383 | 9.395 | VV | 516 | 3153 | 0.04% | 0.013% |
| 143 | 9.414 | 9.395 | 9.500 | VV | 6264 | 220678 | 3.07% | 0.945% |
| 144 | 9.515 | 9.500 | 9.573 | VV | 2478 | 64921 | 0.90% | 0.278% |
| 145 | 9.580 | 9.573 | 9.586 | VV | 1106 | 8183 | 0.11% | 0.035% |
| 146 | 9.596 | 9.586 | 9.635 | VV | 1203 | 27007 | 0.38% | 0.116% |
| 147 | 9.637 | 9.635 | 9.641 | VV | 972 | 2437 | 0.03% | 0.010% |
| 148 | 9.651 | 9.641 | 9.672 | VV | 679 | 10407 | 0.14% | 0.045% |
| 149 | 9.675 | 9.672 | 9.679 | VV | 499 | 1935 | 0.03% | 0.008% |
| 150 | 9.684 | 9.679 | 9.706 | VV | 574 | 7206 | 0.10% | 0.031% |
| 151 | 9.713 | 9.706 | 9.723 | VV | 436 | 3410 | 0.05% | 0.015% |
| 152 | 9.726 | 9.723 | 9.730 | VV | 330 | 1250 | 0.02% | 0.005% |
| 153 | 9.744 | 9.730 | 9.762 | VV | 512 | 7746 | 0.11% | 0.033% |
| 154 | 9.765 | 9.762 | 9.769 | VV | 379 | 1585 | 0.02% | 0.007% |
| 155 | 9.789 | 9.769 | 9.798 | VV | 784 | 9773 | 0.14% | 0.042% |
| 156 | 9.819 | 9.798 | 9.845 | VV | 1238 | 22700 | 0.32% | 0.097% |
| 157 | 9.865 | 9.845 | 9.875 | VV | 568 | 8257 | 0.11% | 0.035% |
| 158 | 9.905 | 9.875 | 9.920 | VV | 844 | 16413 | 0.23% | 0.070% |
| 159 | 9.934 | 9.920 | 9.945 | VV | 798 | 9198 | 0.13% | 0.039% |
| 160 | 9.964 | 9.945 | 9.978 | VV | 635 | 10069 | 0.14% | 0.043% |
| 161 | 10.011 | 9.978 | 10.049 | VV | 1784 | 28615 | 0.40% | 0.122% |
| 162 | 10.107 | 10.049 | 10.120 | VV | 806 | 20369 | 0.28% | 0.087% |
| 163 | 10.127 | 10.120 | 10.150 | VV | 758 | 10646 | 0.15% | 0.046% |
| 164 | 10.183 | 10.150 | 10.211 | VV | 1017 | 22962 | 0.32% | 0.098% |
| 165 | 10.218 | 10.211 | 10.234 | VV | 649 | 8305 | 0.12% | 0.036% |
| 166 | 10.255 | 10.234 | 10.283 | VV | 1008 | 20435 | 0.28% | 0.087% |
| 167 | 10.294 | 10.283 | 10.311 | VV | 861 | 9768 | 0.14% | 0.042% |
| 168 | 10.322 | 10.311 | 10.337 | VV | 687 | 8035 | 0.11% | 0.034% |
| 169 | 10.363 | 10.337 | 10.391 | VV | 2166 | 36178 | 0.50% | 0.155% |
| 170 | 10.398 | 10.391 | 10.403 | VV | 524 | 2658 | 0.04% | 0.011% |
| 171 | 10.411 | 10.403 | 10.425 | VV | 511 | 6094 | 0.08% | 0.026% |
| 172 | 10.461 | 10.425 | 10.476 | VV | 709 | 13084 | 0.18% | 0.056% |
| 173 | 10.480 | 10.476 | 10.495 | VV | 329 | 2962 | 0.04% | 0.013% |
| 174 | 10.500 | 10.495 | 10.505 | VV | 338 | 1485 | 0.02% | 0.006% |
| 175 | 10.522 | 10.505 | 10.530 | VV | 598 | 5749 | 0.08% | 0.025% |
| 176 | 10.538 | 10.530 | 10.546 | VV | 615 | 5045 | 0.07% | 0.022% |
| 177 | 10.568 | 10.546 | 10.575 | VV | 601 | 8249 | 0.11% | 0.035% |
| 178 | 10.604 | 10.575 | 10.620 | VV | 534 | 9619 | 0.13% | 0.041% |
| 179 | 10.639 | 10.620 | 10.645 | VV | 608 | 6181 | 0.09% | 0.026% |
| 180 | 10.663 | 10.645 | 10.679 | VV | 1077 | 12958 | 0.18% | 0.055% |
| 181 | 10.703 | 10.679 | 10.713 | VV | 561 | 6517 | 0.09% | 0.028% |
| 182 | 10.728 | 10.713 | 10.740 | VV | 517 | 4757 | 0.07% | 0.020% |
| 183 | 10.748 | 10.740 | 10.754 | VV | 416 | 2088 | 0.03% | 0.009% |
| 184 | 10.760 | 10.754 | 10.786 | VV | 232 | 4540 | 0.06% | 0.019% |
| 185 | 10.795 | 10.786 | 10.802 | VV | 299 | 2162 | 0.03% | 0.009% |
| 186 | 10.814 | 10.802 | 10.819 | VV | 352 | 2563 | 0.04% | 0.011% |
| 187 | 10.823 | 10.819 | 10.834 | VV | 287 | 1742 | 0.02% | 0.007% |
| 188 | 10.881 | 10.834 | 10.910 | VV | 687 | 17721 | 0.25% | 0.076% |
| 189 | 10.946 | 10.910 | 10.972 | VV | 1316 | 24784 | 0.34% | 0.106% |
| 190 | 10.987 | 10.972 | 10.995 | VV | 444 | 5325 | 0.07% | 0.023% |
| 191 | 11.004 | 10.995 | 11.015 | VV | 491 | 4007 | 0.06% | 0.017% |
| 192 | 11.033 | 11.015 | 11.075 | VV | 993 | 18025 | 0.25% | 0.077% |
| 193 | 11.098 | 11.075 | 11.120 | VV | 372 | 5471 | 0.08% | 0.023% |
| 194 | 11.152 | 11.120 | 11.195 | VV | 532 | 11236 | 0.16% | 0.048% |

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|---|---|---|---|---|---|---|---|---|
| 195 | 11.233 | 11.195 | 11.319 | PV | 348978 | 3938687 | 54.77% | 16.861% |
| 196 | 11.320 | 11.319 | 11.347 | VV | 1752 | 20322 | 0.28% | 0.087% |
| 197 | 11.350 | 11.347 | 11.385 | VV | 850 | 14861 | 0.21% | 0.064% |
| 198 | 11.409 | 11.385 | 11.440 | VV | 1761 | 32788 | 0.46% | 0.140% |
| 199 | 11.445 | 11.440 | 11.478 | VV | 587 | 9710 | 0.14% | 0.042% |
| 200 | 11.493 | 11.478 | 11.497 | VV | 650 | 5281 | 0.07% | 0.023% |
| 201 | 11.509 | 11.497 | 11.517 | VV | 749 | 7019 | 0.10% | 0.030% |
| 202 | 11.528 | 11.517 | 11.537 | VV | 742 | 7814 | 0.11% | 0.033% |
| 203 | 11.565 | 11.537 | 11.582 | VV | 1039 | 21078 | 0.29% | 0.090% |
| 204 | 11.592 | 11.582 | 11.615 | VV | 1196 | 16907 | 0.24% | 0.072% |
| 205 | 11.624 | 11.615 | 11.630 | VV | 845 | 6441 | 0.09% | 0.028% |
| 206 | 11.636 | 11.630 | 11.641 | VV | 757 | 4319 | 0.06% | 0.018% |
| 207 | 11.672 | 11.641 | 11.714 | VV | 4355 | 76475 | 1.06% | 0.327% |
| 208 | 11.737 | 11.714 | 11.748 | VV | 868 | 13626 | 0.19% | 0.058% |
| 209 | 11.757 | 11.748 | 11.771 | VV | 872 | 9840 | 0.14% | 0.042% |
| 210 | 11.815 | 11.771 | 11.847 | VV | 1865 | 48368 | 0.67% | 0.207% |
| 211 | 11.868 | 11.847 | 11.927 | VV | 11310 | 243939 | 3.39% | 1.044% |
| 212 | 11.936 | 11.927 | 11.964 | VV | 2136 | 37707 | 0.52% | 0.161% |
| 213 | 11.980 | 11.964 | 12.010 | VV | 1553 | 37475 | 0.52% | 0.160% |
| 214 | 12.019 | 12.010 | 12.037 | VV | 1263 | 18175 | 0.25% | 0.078% |
| 215 | 12.040 | 12.037 | 12.047 | VV | 934 | 5517 | 0.08% | 0.024% |
| 216 | 12.053 | 12.047 | 12.060 | VV | 1033 | 7035 | 0.10% | 0.030% |
| 217 | 12.102 | 12.060 | 12.138 | VV | 6945 | 111491 | 1.55% | 0.477% |
| 218 | 12.179 | 12.138 | 12.219 | VV | 1462 | 38558 | 0.54% | 0.165% |
| 219 | 12.243 | 12.219 | 12.282 | VV | 1874 | 32848 | 0.46% | 0.141% |
| 220 | 12.310 | 12.282 | 12.352 | VV | 3269 | 55970 | 0.78% | 0.240% |
| 221 | 12.361 | 12.352 | 12.423 | VV | 440 | 13165 | 0.18% | 0.056% |
| 222 | 12.454 | 12.423 | 12.462 | PV | 288 | 3785 | 0.05% | 0.016% |
| 223 | 12.472 | 12.462 | 12.484 | VV | 400 | 3299 | 0.05% | 0.014% |
| 224 | 12.526 | 12.484 | 12.550 | VV | 597 | 15208 | 0.21% | 0.065% |
| 225 | 12.564 | 12.550 | 12.576 | VV | 495 | 6488 | 0.09% | 0.028% |
| 226 | 12.634 | 12.576 | 12.644 | VV | 703 | 21257 | 0.30% | 0.091% |
| 227 | 12.677 | 12.644 | 12.824 | VV | 78279 | 1036453 | 14.41% | 4.437% |
| 228 | 12.861 | 12.824 | 12.882 | VV | 890 | 24164 | 0.34% | 0.103% |
| 229 | 12.920 | 12.882 | 12.979 | VV | 3016 | 67006 | 0.93% | 0.287% |
| 230 | 13.004 | 12.979 | 13.017 | VV | 742 | 14672 | 0.20% | 0.063% |
| 231 | 13.055 | 13.017 | 13.076 | VV | 1043 | 28789 | 0.40% | 0.123% |
| 232 | 13.106 | 13.076 | 13.210 | VV | 3926 | 132492 | 1.84% | 0.567% |
| 233 | 13.225 | 13.210 | 13.249 | VV | 796 | 15538 | 0.22% | 0.067% |
| 234 | 13.264 | 13.249 | 13.282 | VV | 872 | 15234 | 0.21% | 0.065% |
| 235 | 13.298 | 13.282 | 13.324 | VV | 888 | 17890 | 0.25% | 0.077% |
| 236 | 13.335 | 13.324 | 13.350 | VV | 751 | 9381 | 0.13% | 0.040% |
| 237 | 13.381 | 13.350 | 13.417 | VV | 1230 | 33428 | 0.46% | 0.143% |
| 238 | 13.433 | 13.417 | 13.468 | VV | 2041 | 32223 | 0.45% | 0.138% |
| 239 | 13.482 | 13.468 | 13.525 | VV | 505 | 12682 | 0.18% | 0.054% |
| 240 | 13.542 | 13.525 | 13.584 | VV | 595 | 14913 | 0.21% | 0.064% |
| 241 | 13.592 | 13.584 | 13.640 | VV | 517 | 10639 | 0.15% | 0.046% |
| 242 | 13.653 | 13.640 | 13.681 | VV | 469 | 7721 | 0.11% | 0.033% |
| 243 | 13.704 | 13.681 | 13.714 | VV | 459 | 6265 | 0.09% | 0.027% |
| 244 | 13.725 | 13.714 | 13.750 | VV | 484 | 6904 | 0.10% | 0.030% |
| 245 | 13.767 | 13.750 | 13.780 | VV | 439 | 5377 | 0.07% | 0.023% |
| 246 | 13.801 | 13.780 | 13.829 | VV | 372 | 8926 | 0.12% | 0.038% |

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|---|---|---|---|---|---|---|---|---|
| 247 | 13.889 | 13.829 | 13.964 | VV | 1086 | 46574 | 0.65% | 0.199% |
| 248 | 13.996 | 13.964 | 14.036 | VV | 681 | 19329 | 0.27% | 0.083% |
| 249 | 14.056 | 14.036 | 14.063 | VV | 428 | 5277 | 0.07% | 0.023% |
| 250 | 14.078 | 14.063 | 14.100 | VV | 545 | 9193 | 0.13% | 0.039% |
| 251 | 14.118 | 14.100 | 14.139 | VV | 626 | 10494 | 0.15% | 0.045% |
| 252 | 14.167 | 14.139 | 14.184 | VV | 675 | 15045 | 0.21% | 0.064% |
| 253 | 14.190 | 14.184 | 14.215 | VV | 604 | 9512 | 0.13% | 0.041% |
| 254 | 14.236 | 14.215 | 14.268 | VV | 649 | 14902 | 0.21% | 0.064% |
| 255 | 14.295 | 14.268 | 14.324 | VV | 687 | 16799 | 0.23% | 0.072% |
| 256 | 14.336 | 14.324 | 14.355 | VV | 605 | 7940 | 0.11% | 0.034% |
| 257 | 14.388 | 14.355 | 14.430 | VV | 564 | 16286 | 0.23% | 0.070% |
| 258 | 14.450 | 14.430 | 14.460 | VV | 441 | 6672 | 0.09% | 0.029% |
| 259 | 14.491 | 14.460 | 14.512 | VV | 1234 | 25870 | 0.36% | 0.111% |
| 260 | 14.532 | 14.512 | 14.570 | VV | 1915 | 36092 | 0.50% | 0.155% |
| 261 | 14.593 | 14.570 | 14.626 | VV | 955 | 18221 | 0.25% | 0.078% |
| 262 | 14.642 | 14.626 | 14.670 | VV | 413 | 6800 | 0.09% | 0.029% |
| 263 | 14.698 | 14.670 | 14.775 | PV | 748 | 22835 | 0.32% | 0.098% |
| 264 | 14.793 | 14.775 | 14.827 | VV | 421 | 8092 | 0.11% | 0.035% |
| 265 | 14.847 | 14.827 | 14.889 | VV | 570 | 14615 | 0.20% | 0.063% |
| 266 | 14.915 | 14.889 | 14.984 | VV | 8347 | 196729 | 2.74% | 0.842% |
| 267 | 14.991 | 14.984 | 15.030 | VV | 1503 | 31859 | 0.44% | 0.136% |
| 268 | 15.073 | 15.030 | 15.134 | VV | 2047 | 67670 | 0.94% | 0.290% |
| 269 | 15.141 | 15.134 | 15.160 | VV | 618 | 8040 | 0.11% | 0.034% |
| 270 | 15.195 | 15.160 | 15.218 | VV | 708 | 20416 | 0.28% | 0.087% |
| 271 | 15.240 | 15.218 | 15.303 | VV | 1045 | 31385 | 0.44% | 0.134% |
| 272 | 15.389 | 15.303 | 15.417 | VV | 736 | 34134 | 0.47% | 0.146% |
| 273 | 15.433 | 15.417 | 15.482 | VV | 660 | 18993 | 0.26% | 0.081% |
| 274 | 15.510 | 15.482 | 15.529 | VV | 1060 | 18848 | 0.26% | 0.081% |
| 275 | 15.546 | 15.529 | 15.572 | VV | 1631 | 26620 | 0.37% | 0.114% |
| 276 | 15.586 | 15.572 | 15.615 | VV | 658 | 12877 | 0.18% | 0.055% |
| 277 | 15.627 | 15.615 | 15.650 | VV | 576 | 6544 | 0.09% | 0.028% |
| 278 | 15.706 | 15.650 | 15.716 | VV | 447 | 6870 | 0.10% | 0.029% |
| 279 | 15.728 | 15.716 | 15.800 | VV | 289 | 7778 | 0.11% | 0.033% |
| 280 | 15.834 | 15.800 | 15.855 | VV | 517 | 5996 | 0.08% | 0.026% |
| 281 | 15.871 | 15.855 | 15.889 | PV | 238 | 2487 | 0.03% | 0.011% |
| 282 | 15.936 | 15.889 | 15.964 | VV | 1013 | 23397 | 0.33% | 0.100% |
| 283 | 15.986 | 15.964 | 16.009 | VV | 862 | 15767 | 0.22% | 0.067% |
| 284 | 16.025 | 16.009 | 16.070 | VV | 867 | 20359 | 0.28% | 0.087% |
| 285 | 16.080 | 16.070 | 16.099 | VV | 546 | 6830 | 0.09% | 0.029% |
| 286 | 16.130 | 16.099 | 16.166 | VV | 890 | 24269 | 0.34% | 0.104% |
| 287 | 16.184 | 16.166 | 16.202 | VV | 493 | 9304 | 0.13% | 0.040% |
| 288 | 16.234 | 16.202 | 16.305 | VV | 1152 | 40894 | 0.57% | 0.175% |
| 289 | 16.332 | 16.305 | 16.354 | VV | 670 | 15418 | 0.21% | 0.066% |
| 290 | 16.405 | 16.354 | 16.435 | VV | 865 | 32422 | 0.45% | 0.139% |
| 291 | 16.458 | 16.435 | 16.471 | VV | 1237 | 19691 | 0.27% | 0.084% |
| 292 | 16.490 | 16.471 | 16.508 | VV | 1962 | 29770 | 0.41% | 0.127% |
| 293 | 16.533 | 16.508 | 16.564 | VV | 5869 | 90831 | 1.26% | 0.389% |
| 294 | 16.584 | 16.564 | 16.644 | VV | 771 | 23792 | 0.33% | 0.102% |
| 295 | 16.650 | 16.644 | 16.689 | VV | 439 | 8258 | 0.11% | 0.035% |
| 296 | 16.696 | 16.689 | 16.726 | VV | 363 | 4809 | 0.07% | 0.021% |
| 297 | 16.737 | 16.726 | 16.745 | PV | 197 | 1995 | 0.03% | 0.009% |
| 298 | 16.759 | 16.745 | 16.769 | VV | 318 | 3319 | 0.05% | 0.014% |
| 299 | 16.805 | 16.769 | 16.845 | VV | 920 | 20624 | 0.29% | 0.088% |

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|---|---|---|---|---|---|---|---|---|
| 300 | 16.870 | 16.845 | 16.917 | VV | 643 | 20292 | 0.28% | 0.087% |
| 301 | 16.941 | 16.917 | 16.987 | VV | 1587 | 28097 | 0.39% | 0.120% |
| 302 | 17.017 | 16.987 | 17.082 | VV | 468 | 19034 | 0.26% | 0.081% |
| 303 | 17.104 | 17.082 | 17.120 | VV | 474 | 7062 | 0.10% | 0.030% |
| 304 | 17.130 | 17.120 | 17.153 | VV | 408 | 4546 | 0.06% | 0.019% |
| 305 | 17.182 | 17.153 | 17.218 | PV | 412 | 11853 | 0.16% | 0.051% |
| 306 | 17.229 | 17.218 | 17.242 | VV | 309 | 3478 | 0.05% | 0.015% |
| 307 | 17.251 | 17.242 | 17.264 | VV | 215 | 2308 | 0.03% | 0.010% |
| 308 | 17.270 | 17.264 | 17.287 | VV | 224 | 2180 | 0.03% | 0.009% |
| 309 | 17.345 | 17.287 | 17.357 | VV | 1155 | 20868 | 0.29% | 0.089% |
| 310 | 17.373 | 17.357 | 17.404 | VV | 1604 | 26401 | 0.37% | 0.113% |
| 311 | 17.470 | 17.404 | 17.534 | VV | 2064 | 53209 | 0.74% | 0.228% |
| 312 | 17.540 | 17.534 | 17.570 | VV | 449 | 6310 | 0.09% | 0.027% |
| 313 | 17.578 | 17.570 | 17.607 | VV | 430 | 4279 | 0.06% | 0.018% |
| 314 | 17.672 | 17.607 | 17.690 | VV | 479 | 9599 | 0.13% | 0.041% |
| 315 | 17.735 | 17.690 | 17.772 | VV | 3988 | 88485 | 1.23% | 0.379% |
| 316 | 17.793 | 17.772 | 17.869 | VV | 2041 | 56978 | 0.79% | 0.244% |
| 317 | 17.901 | 17.869 | 17.954 | VV | 572 | 20668 | 0.29% | 0.088% |
| 318 | 17.971 | 17.954 | 18.047 | VV | 357 | 12935 | 0.18% | 0.055% |
| 319 | 18.053 | 18.047 | 18.089 | PV | 229 | 2746 | 0.04% | 0.012% |
| 320 | 18.097 | 18.089 | 18.118 | VV | 129 | 1810 | 0.03% | 0.008% |
| 321 | 18.201 | 18.118 | 18.232 | VV | 1996 | 51003 | 0.71% | 0.218% |
| 322 | 18.239 | 18.232 | 18.275 | VV | 638 | 9223 | 0.13% | 0.039% |

Sum of corrected areas: 23359609

Aromatic EPH 021125.M Sat Mar 01 04:04:28 2025

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Weston Solutions, Inc. | Date Collected: | 02/24/25 |
| Project: | RFP 905 | Date Received: | 02/24/25 |
| Client Sample ID: | P001-CLAY-CF02-01 | SDG No.: | Q1421 |
| Lab Sample ID: | Q1421-10 | Matrix: | Water |
| Analytical Method: | NJEPH | % Solid: | 0 |
| Sample Wt/Vol: | 1000 Units: mL | Final Vol: | 2000 uL |
| Soil Aliquot Vol: | uL | Test: | EPH |
| Prep Method : | SW3510 | | |

| Prep Date : | Date Analyzed : | Prep Batch ID |
|---|---|---|
| 02/26/25 11:45 | 02/27/25 15:53 | PB166883 |

| CAS Number | Parameter | Conc. | Qualifier | Dilution | MDL | LOQ / CRQL | Units | Datafile |
|---|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | | |
| Aliphatic C9-C12 | Aliphatic C9-C12 | 5.76 | U | 1 | 5.76 | 30.0 | ug/l | FC068315.D |
| Aliphatic C12-C16 | Aliphatic C12-C16 | 7.29 | J | 1 | 3.61 | 20.0 | ug/l | FC068315.D |
| Aliphatic C16-C21 | Aliphatic C16-C21 | 5.14 | U | 1 | 5.14 | 30.0 | ug/l | FC068315.D |
| Aliphatic C21-C28 | Aliphatic C21-C28 | 8.97 | U | 1 | 8.97 | 40.0 | ug/l | FC068315.D |
| Aliphatic C28-C40 | Aliphatic C28-C40 | 17.0 | U | 1 | 17.0 | 60.0 | ug/l | FC068315.D |
| Aromatic C10-C12 | Aromatic C10-C12 | 9.81 | J | 1 | 3.32 | 20.0 | ug/l | FD049124.D |
| Aromatic C12-C16 | Aromatic C12-C16 | 14.1 | J | 1 | 3.69 | 30.0 | ug/l | FD049124.D |
| Aromatic C16-C21 | Aromatic C16-C21 | 41.8 | J | 1 | 12.7 | 50.0 | ug/l | FD049124.D |
| Aromatic C21-C36 | Aromatic C21-C36 | 87.2 | | 1 | 25.2 | 80.0 | ug/l | FD049124.D |
| Total AliphaticEPH | Total AliphaticEPH | 40.5 | U | | 40.5 | 180 | ug/l | |
| Total AromaticEPH | Total AromaticEPH | 153 | J | | 44.9 | 180 | ug/l | |
| Total EPH | Total EPH | 160 | J | | 85.4 | 360 | ug/l | |

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control 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

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Weston Solutions, Inc. | Date Collected: | 02/24/25 |
| Project: | RFP 905 | Date Received: | 02/24/25 |
| Client Sample ID: | P001-CLAY-CF02-01 | SDG No.: | Q1421 |
| Lab Sample ID: | Q1421-10 | Matrix: | Water |
| Analytical Method: | NJEPH | % Solid: | 0 |
| Sample Wt/Vol: | 1000 Units: mL | Final Vol: | 2000 uL |
| Soil Aliquot Vol: | uL | Test: | EPH |
| Prep Method : | SW3510 | | |

| File ID : | Dilution: | Prep Date : | Date Analyzed : | Prep Batch ID |
|---|---|---|---|---|
| FC068315.D | 1 | 02/26/25 | 02/27/25 | PB166883 |

| CAS Number | Parameter | | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | |
| Aliphatic C9-C12 | Aliphatic C9-C12 | | 5.76 | U | 5.76 | 30.0 | ug/l |
| Aliphatic C12-C16 | Aliphatic C12-C16 | | 7.29 | J | 3.61 | 20.0 | ug/l |
| Aliphatic C16-C21 | Aliphatic C16-C21 | | 5.14 | U | 5.14 | 30.0 | ug/l |
| Aliphatic C21-C28 | Aliphatic C21-C28 | | 8.97 | U | 8.97 | 40.0 | ug/l |
| Aliphatic C28-C40 | Aliphatic C28-C40 | | 17.0 | U | 17.0 | 60.0 | ug/l |
| **SURROGATES** | | | | | | | |
| 3383-33-2 | 1-chlorooctadecane (SURR) | | 30.9 | | 40 - 140 | 62% | SPK: 50 |
| 84-15-1 | ortho-Terphenyl (SURR) | | 0.00 | | 40 - 140 | 0% | SPK: 50 |

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

# Quantitation Report For Aliphatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | Q1421-10 | Acq On: | 27 Feb 2025 15:53 |
| Client Sample ID: | P001-CLAY-CF02-01 | Operator: | YP/AJ |
| Data file: | FC068315.D | Misc: | |
| Instrument: | FID_C | ALS Vial: | 18 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aliphatic C9-C12 | 3.104 | 6.370 | 339595 | 2.408 | 300 | ug/ml |
| Aliphatic C12-C16 | 6.371 | 9.754 | 498397 | 3.647 | 200 | ug/ml |
| Aliphatic C16-C21 | 9.755 | 13.108 | 439396 | 3.338 | 300 | ug/ml |
| Aliphatic C21-C28 | 13.109 | 16.762 | 592177 | 4.827 | 400 | ug/ml |
| Aliphatic C28-C40 | 16.763 | 21.566 | 2560351 | 24.895 | 600 | ug/ml |
| Aliphatic EPH | 3.104 | 21.566 | 4429916 | 39.115 | | ug/ml |
| ortho-Terphenyl (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |
| 1-chlorooctadecane (SURR) | 12.840 | 12.840 | 3469736 | 30.85 | | ug/ml |
| Aliphatic C9-C28 | 3.104 | 16.762 | 1869565 | 14.22 | 1200 | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022725AL\
Data File : FC068315.D
Signal(s) : FID1A.ch
Acq On : 27 Feb 2025 15:53
Operator : YP/AJ
Sample : Q1421-10
Misc :
ALS Vial : 18 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
P001-CLAY-CF02-01

Integration File: autoint1.e
Quant Time: Mar 05 04:44:59 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

| Compound | R.T. | Response | Conc Units |
|---|---|---|---|
| System Monitoring Compounds | | | |
| 12) S 1-chlorooctadecane (S... | 12.840 | 3469736 | 30.849 ug/ml |
| Spiked Amount 50.000 | | Recovery = 61.70% | |
| Target Compounds | | | |

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

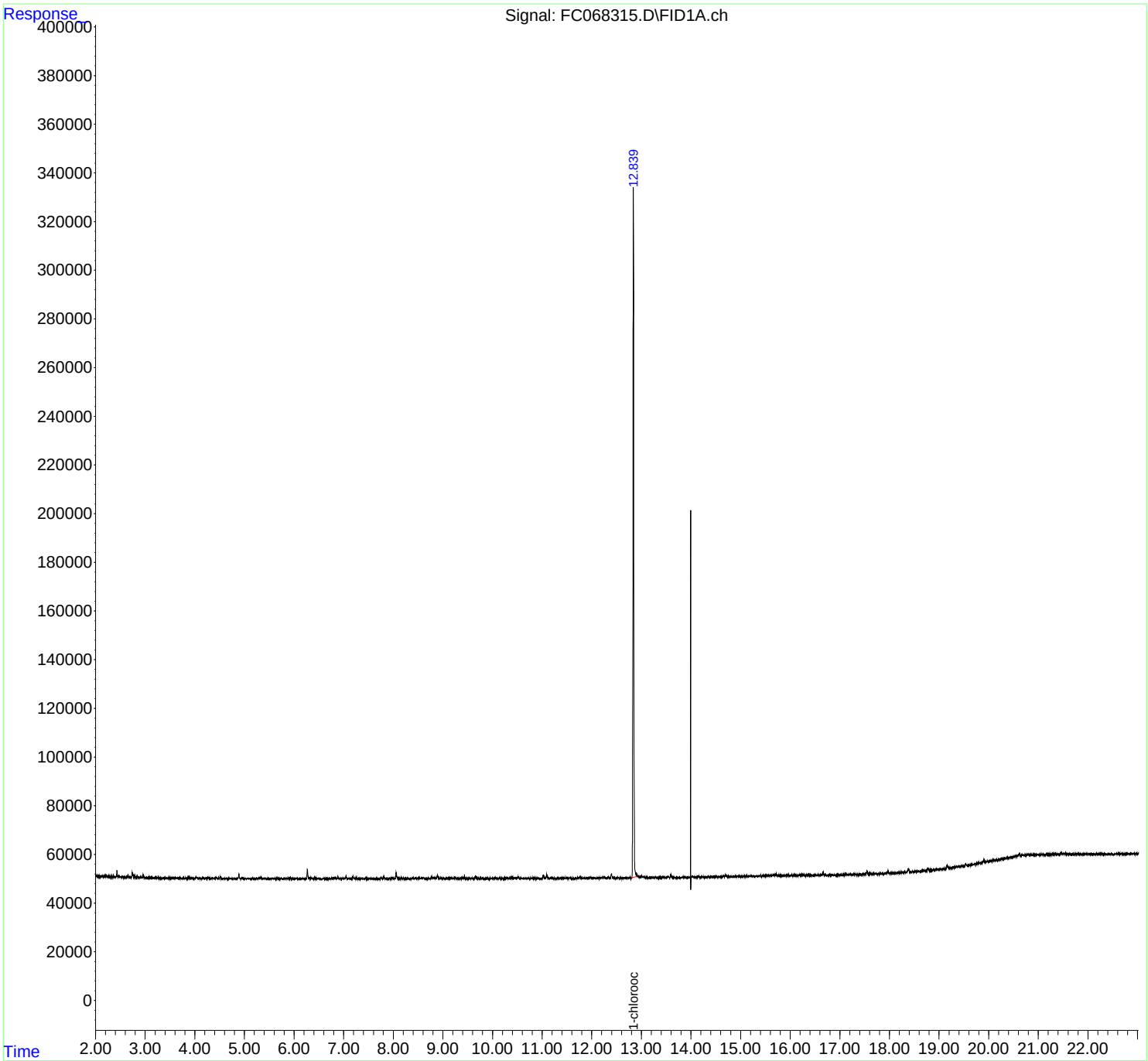
Quantitation Report (QT Reviewed)

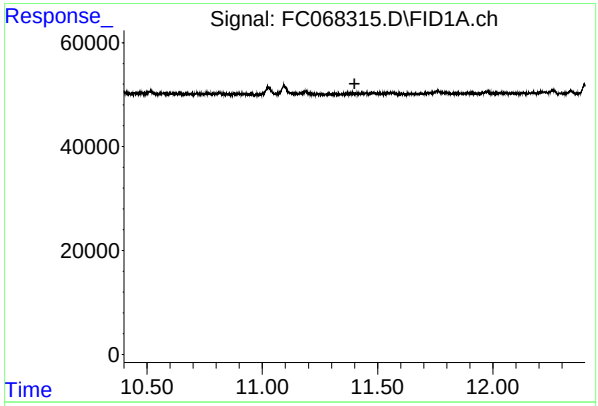
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022725AL\
Data File : FC068315.D
Signal(s) : FID1A.ch
Acq On : 27 Feb 2025 15:53
Operator : YP/AJ
Sample : Q1421-10
Misc :
ALS Vial : 18 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
P001-CLAY-CF02-01

Integration File: autoint1.e
Quant Time: Mar 05 04:44:59 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

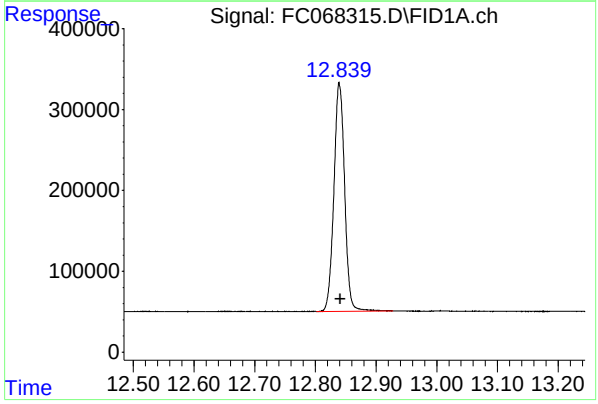





#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.400 min
Response: 0
Conc: N.D.

**Instrument :**
FID_C
**ClientSampleId :**
P001-CLAY-CF02-01




#12 1-chlorooctadecane (SURR)

R.T.: 12.840 min
Delta R.T.: -0.002 min
Response: 3469736
Conc: 30.85 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022725AL\
Data File : FC068315.D
Signal(s) : FID1A.ch
Acq On : 27 Feb 2025 15:53
Sample : Q1421-10
Misc :
ALS Vial : 18 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Title : GC Extractables

Signal : FID1A.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 2.359 | 2.305 | 2.395 | BV | 237 | 2872 | 0.08% | 0.035% |
| 2 | 2.431 | 2.395 | 2.458 | PV | 2775 | 23169 | 0.66% | 0.280% |
| 3 | 2.472 | 2.458 | 2.521 | VV | 707 | 7201 | 0.20% | 0.087% |
| 4 | 2.523 | 2.521 | 2.549 | VV | 108 | 1024 | 0.03% | 0.012% |
| 5 | 2.558 | 2.549 | 2.580 | VV | 79 | 889 | 0.03% | 0.011% |
| 6 | 2.592 | 2.580 | 2.625 | VV | 79 | 996 | 0.03% | 0.012% |
| 7 | 2.633 | 2.625 | 2.641 | PV | 52 | 750 | 0.02% | 0.009% |
| 8 | 2.655 | 2.641 | 2.705 | VV | 710 | 8305 | 0.23% | 0.100% |
| 9 | 2.741 | 2.705 | 2.774 | VV | 1995 | 28650 | 0.81% | 0.346% |
| 10 | 2.788 | 2.774 | 2.815 | VV | 899 | 9927 | 0.28% | 0.120% |
| 11 | 2.839 | 2.815 | 2.901 | VV | 836 | 12296 | 0.35% | 0.148% |
| 12 | 2.917 | 2.901 | 2.938 | VV | 173 | 3196 | 0.09% | 0.039% |
| 13 | 2.961 | 2.938 | 3.015 | VV | 1363 | 15434 | 0.44% | 0.186% |
| 14 | 3.022 | 3.015 | 3.035 | VV | 113 | 952 | 0.03% | 0.011% |
| 15 | 3.064 | 3.035 | 3.091 | PV | 156 | 2090 | 0.06% | 0.025% |
| 16 | 3.094 | 3.091 | 3.149 | VV | 114 | 1475 | 0.04% | 0.018% |
| 17 | 3.158 | 3.149 | 3.187 | VV | 94 | 1109 | 0.03% | 0.013% |
| 18 | 3.208 | 3.187 | 3.272 | VV | 237 | 4954 | 0.14% | 0.060% |
| 19 | 3.283 | 3.272 | 3.390 | PV | 134 | 2816 | 0.08% | 0.034% |
| 20 | 3.406 | 3.390 | 3.454 | VV | 133 | 1952 | 0.06% | 0.024% |
| 21 | 3.463 | 3.454 | 3.488 | VV | 135 | 1496 | 0.04% | 0.018% |
| 22 | 3.499 | 3.488 | 3.511 | VV | 157 | 1494 | 0.04% | 0.018% |
| 23 | 3.525 | 3.511 | 3.555 | VV | 189 | 2310 | 0.07% | 0.028% |
| 24 | 3.577 | 3.555 | 3.661 | PV | 153 | 5585 | 0.16% | 0.067% |
| 25 | 3.694 | 3.661 | 3.757 | VV | 269 | 8291 | 0.23% | 0.100% |
| 26 | 3.775 | 3.757 | 3.824 | VV | 331 | 4696 | 0.13% | 0.057% |
| 27 | 3.838 | 3.824 | 3.855 | PV | 125 | 1391 | 0.04% | 0.017% |
| 28 | 3.866 | 3.855 | 3.880 | VV | 435 | 3795 | 0.11% | 0.046% |
| 29 | 3.894 | 3.880 | 3.941 | VV | 496 | 6298 | 0.18% | 0.076% |
| 30 | 3.960 | 3.941 | 3.978 | VV | 151 | 1969 | 0.06% | 0.024% |
| 31 | 4.028 | 3.978 | 4.065 | VV | 746 | 13642 | 0.39% | 0.165% |
| 32 | 4.095 | 4.065 | 4.138 | VV | 183 | 4229 | 0.12% | 0.051% |
| 33 | 4.180 | 4.138 | 4.201 | VV | 222 | 5122 | 0.14% | 0.062% |
| 34 | 4.210 | 4.201 | 4.238 | VV | 156 | 2989 | 0.08% | 0.036% |
| 35 | 4.263 | 4.238 | 4.291 | VV | 601 | 8561 | 0.24% | 0.103% |
| 36 | 4.301 | 4.291 | 4.342 | VV | 386 | 6062 | 0.17% | 0.073% |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 37 | 4.364 | 4.342 | 4.391 | VV | 441 | 7072 | 0.20% | 0.085% |
| 38 | 4.428 | 4.391 | 4.452 | VV | 713 | 11728 | 0.33% | 0.142% |
| 39 | 4.484 | 4.452 | 4.497 | VV | 463 | 7647 | 0.22% | 0.092% |
| 40 | 4.513 | 4.497 | 4.553 | VV | 803 | 10667 | 0.30% | 0.129% |
| 41 | 4.576 | 4.553 | 4.588 | VV | 128 | 1930 | 0.05% | 0.023% |
| 42 | 4.601 | 4.588 | 4.667 | VV | 171 | 5381 | 0.15% | 0.065% |
| 43 | 4.677 | 4.667 | 4.690 | VV | 168 | 1807 | 0.05% | 0.022% |
| 44 | 4.709 | 4.690 | 4.767 | VV | 184 | 4763 | 0.13% | 0.058% |
| 45 | 4.793 | 4.767 | 4.847 | PV | 172 | 4447 | 0.13% | 0.054% |
| 46 | 4.890 | 4.847 | 4.925 | VV | 2101 | 27059 | 0.77% | 0.327% |
| 47 | 4.947 | 4.925 | 4.963 | VV | 418 | 5375 | 0.15% | 0.065% |
| 48 | 4.974 | 4.963 | 5.031 | VV | 262 | 4142 | 0.12% | 0.050% |
| 49 | 5.058 | 5.031 | 5.071 | PV | 153 | 2082 | 0.06% | 0.025% |
| 50 | 5.079 | 5.071 | 5.108 | VV | 155 | 2264 | 0.06% | 0.027% |
| 51 | 5.122 | 5.108 | 5.142 | VV | 137 | 1692 | 0.05% | 0.020% |
| 52 | 5.164 | 5.142 | 5.201 | VV | 191 | 4342 | 0.12% | 0.052% |
| 53 | 5.207 | 5.201 | 5.231 | VV | 159 | 1981 | 0.06% | 0.024% |
| 54 | 5.238 | 5.231 | 5.278 | VV | 136 | 3386 | 0.10% | 0.041% |
| 55 | 5.294 | 5.278 | 5.315 | VV | 429 | 6188 | 0.18% | 0.075% |
| 56 | 5.332 | 5.315 | 5.378 | VV | 767 | 11297 | 0.32% | 0.136% |
| 57 | 5.391 | 5.378 | 5.428 | VV | 195 | 3519 | 0.10% | 0.042% |
| 58 | 5.434 | 5.428 | 5.446 | VV | 124 | 1021 | 0.03% | 0.012% |
| 59 | 5.471 | 5.446 | 5.508 | VV | 223 | 4599 | 0.13% | 0.056% |
| 60 | 5.515 | 5.508 | 5.534 | VV | 107 | 1158 | 0.03% | 0.014% |
| 61 | 5.542 | 5.534 | 5.553 | VV | 111 | 880 | 0.02% | 0.011% |
| 62 | 5.582 | 5.553 | 5.615 | VV | 200 | 4655 | 0.13% | 0.056% |
| 63 | 5.621 | 5.615 | 5.645 | VV | 153 | 2064 | 0.06% | 0.025% |
| 64 | 5.658 | 5.645 | 5.695 | VV | 156 | 2620 | 0.07% | 0.032% |
| 65 | 5.744 | 5.695 | 5.777 | VV | 305 | 5321 | 0.15% | 0.064% |
| 66 | 5.787 | 5.777 | 5.815 | VV | 152 | 2134 | 0.06% | 0.026% |
| 67 | 5.842 | 5.815 | 5.871 | VV | 286 | 5728 | 0.16% | 0.069% |
| 68 | 5.887 | 5.871 | 5.910 | VV | 271 | 4561 | 0.13% | 0.055% |
| 69 | 5.929 | 5.910 | 5.974 | VV | 371 | 7872 | 0.22% | 0.095% |
| 70 | 5.992 | 5.974 | 6.028 | VV | 287 | 5964 | 0.17% | 0.072% |
| 71 | 6.060 | 6.028 | 6.123 | VV | 276 | 6713 | 0.19% | 0.081% |
| 72 | 6.191 | 6.123 | 6.208 | VV | 154 | 4787 | 0.14% | 0.058% |
| 73 | 6.215 | 6.208 | 6.240 | VV | 160 | 2007 | 0.06% | 0.024% |
| 74 | 6.270 | 6.240 | 6.335 | VV | 3979 | 53432 | 1.51% | 0.645% |
| 75 | 6.351 | 6.335 | 6.369 | VV | 509 | 6549 | 0.19% | 0.079% |
| 76 | 6.386 | 6.369 | 6.400 | VV | 262 | 3766 | 0.11% | 0.045% |
| 77 | 6.418 | 6.400 | 6.441 | VV | 615 | 8111 | 0.23% | 0.098% |
| 78 | 6.451 | 6.441 | 6.473 | VV | 242 | 3442 | 0.10% | 0.042% |
| 79 | 6.489 | 6.473 | 6.518 | VV | 396 | 5193 | 0.15% | 0.063% |
| 80 | 6.530 | 6.518 | 6.555 | VV | 124 | 2108 | 0.06% | 0.025% |
| 81 | 6.584 | 6.555 | 6.620 | PV | 172 | 3494 | 0.10% | 0.042% |
| 82 | 6.635 | 6.620 | 6.643 | PV | 194 | 1420 | 0.04% | 0.017% |
| 83 | 6.652 | 6.643 | 6.691 | VV | 200 | 3213 | 0.09% | 0.039% |
| 84 | 6.709 | 6.691 | 6.739 | VV | 403 | 5435 | 0.15% | 0.066% |
| 85 | 6.759 | 6.739 | 6.795 | VV | 441 | 8722 | 0.25% | 0.105% |
| 86 | 6.809 | 6.795 | 6.853 | VV | 423 | 9161 | 0.26% | 0.111% |
| 87 | 6.887 | 6.853 | 6.928 | VV | 676 | 12580 | 0.36% | 0.152% |
| 88 | 6.931 | 6.928 | 6.950 | VV | 202 | 1472 | 0.04% | 0.018% |
| 89 | 6.965 | 6.950 | 6.974 | VV | 212 | 1945 | 0.06% | 0.023% |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 90 | 6.990 | 6.974 | 7.025 | VV | 216 | 4092 | 0.12% | 0.049% |
| 91 | 7.049 | 7.025 | 7.076 | VV | 1400 | 16764 | 0.47% | 0.202% |
| 92 | 7.109 | 7.076 | 7.145 | VV | 288 | 7106 | 0.20% | 0.086% |
| 93 | 7.190 | 7.145 | 7.236 | VV | 888 | 19105 | 0.54% | 0.231% |
| 94 | 7.249 | 7.236 | 7.264 | VV | 364 | 3859 | 0.11% | 0.047% |
| 95 | 7.281 | 7.264 | 7.306 | VV | 270 | 4594 | 0.13% | 0.055% |
| 96 | 7.314 | 7.306 | 7.323 | VV | 100 | 767 | 0.02% | 0.009% |
| 97 | 7.342 | 7.323 | 7.388 | VV | 164 | 3417 | 0.10% | 0.041% |
| 98 | 7.402 | 7.388 | 7.428 | VV | 150 | 2046 | 0.06% | 0.025% |
| 99 | 7.448 | 7.428 | 7.478 | VV | 528 | 7310 | 0.21% | 0.088% |
| 100 | 7.498 | 7.478 | 7.508 | VV | 144 | 2055 | 0.06% | 0.025% |
| 101 | 7.550 | 7.508 | 7.568 | VV | 256 | 5838 | 0.17% | 0.070% |
| 102 | 7.608 | 7.568 | 7.631 | VV | 274 | 6032 | 0.17% | 0.073% |
| 103 | 7.644 | 7.631 | 7.659 | VV | 229 | 2612 | 0.07% | 0.032% |
| 104 | 7.668 | 7.659 | 7.701 | VV | 156 | 2929 | 0.08% | 0.035% |
| 105 | 7.710 | 7.701 | 7.735 | VV | 210 | 2401 | 0.07% | 0.029% |
| 106 | 7.755 | 7.735 | 7.788 | VV | 706 | 9288 | 0.26% | 0.112% |
| 107 | 7.810 | 7.788 | 7.888 | VV | 1094 | 17074 | 0.48% | 0.206% |
| 108 | 7.911 | 7.888 | 7.947 | VV | 259 | 5000 | 0.14% | 0.060% |
| 109 | 7.969 | 7.947 | 8.031 | VV | 414 | 10674 | 0.30% | 0.129% |
| 110 | 8.059 | 8.031 | 8.134 | VV | 2696 | 44317 | 1.25% | 0.535% |
| 111 | 8.156 | 8.134 | 8.235 | VV | 383 | 14128 | 0.40% | 0.171% |
| 112 | 8.252 | 8.235 | 8.267 | VV | 237 | 2991 | 0.08% | 0.036% |
| 113 | 8.289 | 8.267 | 8.312 | VV | 319 | 4292 | 0.12% | 0.052% |
| 114 | 8.339 | 8.312 | 8.352 | PV | 119 | 1463 | 0.04% | 0.018% |
| 115 | 8.405 | 8.352 | 8.472 | VV | 416 | 17409 | 0.49% | 0.210% |
| 116 | 8.518 | 8.472 | 8.535 | VV | 373 | 10254 | 0.29% | 0.124% |
| 117 | 8.545 | 8.535 | 8.578 | VV | 312 | 7416 | 0.21% | 0.090% |
| 118 | 8.603 | 8.578 | 8.639 | VV | 493 | 12045 | 0.34% | 0.145% |
| 119 | 8.656 | 8.639 | 8.691 | VV | 270 | 4696 | 0.13% | 0.057% |
| 120 | 8.706 | 8.691 | 8.727 | VV | 315 | 3736 | 0.11% | 0.045% |
| 121 | 8.777 | 8.727 | 8.796 | VV | 1013 | 16087 | 0.46% | 0.194% |
| 122 | 8.812 | 8.796 | 8.860 | VV | 603 | 15636 | 0.44% | 0.189% |
| 123 | 8.891 | 8.860 | 8.944 | VV | 1345 | 28153 | 0.80% | 0.340% |
| 124 | 8.962 | 8.944 | 9.001 | VV | 434 | 8036 | 0.23% | 0.097% |
| 125 | 9.011 | 9.001 | 9.048 | VV | 328 | 5039 | 0.14% | 0.061% |
| 126 | 9.060 | 9.048 | 9.104 | VV | 248 | 6585 | 0.19% | 0.080% |
| 127 | 9.115 | 9.104 | 9.148 | VV | 261 | 5957 | 0.17% | 0.072% |
| 128 | 9.176 | 9.148 | 9.216 | VV | 422 | 10291 | 0.29% | 0.124% |
| 129 | 9.243 | 9.216 | 9.275 | VV | 620 | 11132 | 0.31% | 0.134% |
| 130 | 9.294 | 9.275 | 9.328 | VV | 285 | 5710 | 0.16% | 0.069% |
| 131 | 9.335 | 9.328 | 9.365 | VV | 204 | 2560 | 0.07% | 0.031% |
| 132 | 9.387 | 9.365 | 9.411 | VV | 362 | 6820 | 0.19% | 0.082% |
| 133 | 9.434 | 9.411 | 9.518 | VV | 769 | 15358 | 0.43% | 0.185% |
| 134 | 9.528 | 9.518 | 9.554 | VV | 164 | 2369 | 0.07% | 0.029% |
| 135 | 9.580 | 9.554 | 9.628 | VV | 292 | 7125 | 0.20% | 0.086% |
| 136 | 9.655 | 9.628 | 9.711 | VV | 1123 | 20800 | 0.59% | 0.251% |
| 137 | 9.728 | 9.711 | 9.752 | VV | 230 | 4967 | 0.14% | 0.060% |
| 138 | 9.767 | 9.752 | 9.781 | VV | 169 | 2695 | 0.08% | 0.033% |
| 139 | 9.803 | 9.781 | 9.874 | VV | 235 | 6123 | 0.17% | 0.074% |
| 140 | 9.933 | 9.874 | 9.943 | VV | 202 | 4472 | 0.13% | 0.054% |
| 141 | 9.965 | 9.943 | 10.011 | VV | 262 | 6608 | 0.19% | 0.080% |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 142 | 10.043 | 10.011 | 10.063 | VV | 375 | 8014 | 0.23% | 0.097% |
| 143 | 10.081 | 10.063 | 10.105 | VV | 323 | 5737 | 0.16% | 0.069% |
| 144 | 10.135 | 10.105 | 10.152 | VV | 267 | 5749 | 0.16% | 0.069% |
| 145 | 10.161 | 10.152 | 10.198 | VV | 172 | 3844 | 0.11% | 0.046% |
| 146 | 10.211 | 10.198 | 10.228 | VV | 133 | 2330 | 0.07% | 0.028% |
| 147 | 10.254 | 10.228 | 10.264 | VV | 264 | 3996 | 0.11% | 0.048% |
| 148 | 10.287 | 10.264 | 10.308 | VV | 256 | 4785 | 0.14% | 0.058% |
| 149 | 10.333 | 10.308 | 10.363 | VV | 353 | 8182 | 0.23% | 0.099% |
| 150 | 10.394 | 10.363 | 10.429 | VV | 674 | 14673 | 0.42% | 0.177% |
| 151 | 10.447 | 10.429 | 10.489 | VV | 334 | 9946 | 0.28% | 0.120% |
| 152 | 10.516 | 10.489 | 10.555 | VV | 718 | 13472 | 0.38% | 0.163% |
| 153 | 10.568 | 10.555 | 10.591 | VV | 300 | 4947 | 0.14% | 0.060% |
| 154 | 10.601 | 10.591 | 10.626 | VV | 280 | 4380 | 0.12% | 0.053% |
| 155 | 10.675 | 10.626 | 10.700 | VV | 218 | 7057 | 0.20% | 0.085% |
| 156 | 10.717 | 10.700 | 10.745 | VV | 273 | 4765 | 0.13% | 0.058% |
| 157 | 10.760 | 10.745 | 10.795 | VV | 240 | 5758 | 0.16% | 0.070% |
| 158 | 10.812 | 10.795 | 10.835 | VV | 329 | 5201 | 0.15% | 0.063% |
| 159 | 10.845 | 10.835 | 10.865 | VV | 180 | 2269 | 0.06% | 0.027% |
| 160 | 10.896 | 10.865 | 10.945 | VV | 212 | 6327 | 0.18% | 0.076% |
| 161 | 10.957 | 10.945 | 10.967 | VV | 109 | 721 | 0.02% | 0.009% |
| 162 | 10.978 | 10.967 | 10.992 | VV | 102 | 855 | 0.02% | 0.010% |
| 163 | 11.025 | 10.992 | 11.058 | PV | 1417 | 23590 | 0.67% | 0.285% |
| 164 | 11.094 | 11.058 | 11.154 | VV | 1789 | 33396 | 0.94% | 0.403% |
| 165 | 11.188 | 11.154 | 11.267 | VV | 624 | 14423 | 0.41% | 0.174% |
| 166 | 11.318 | 11.267 | 11.368 | VV | 173 | 5240 | 0.15% | 0.063% |
| 167 | 11.419 | 11.368 | 11.431 | VV | 217 | 6424 | 0.18% | 0.078% |
| 168 | 11.451 | 11.431 | 11.462 | VV | 265 | 3541 | 0.10% | 0.043% |
| 169 | 11.480 | 11.462 | 11.514 | VV | 330 | 6969 | 0.20% | 0.084% |
| 170 | 11.525 | 11.514 | 11.544 | VV | 222 | 3588 | 0.10% | 0.043% |
| 171 | 11.560 | 11.544 | 11.625 | VV | 299 | 7595 | 0.21% | 0.092% |
| 172 | 11.661 | 11.625 | 11.670 | VV | 173 | 3076 | 0.09% | 0.037% |
| 173 | 11.761 | 11.670 | 11.788 | VV | 725 | 21967 | 0.62% | 0.265% |
| 174 | 11.801 | 11.788 | 11.828 | VV | 291 | 5209 | 0.15% | 0.063% |
| 175 | 11.834 | 11.828 | 11.870 | VV | 185 | 3972 | 0.11% | 0.048% |
| 176 | 11.892 | 11.870 | 11.902 | VV | 270 | 3977 | 0.11% | 0.048% |
| 177 | 11.908 | 11.902 | 11.937 | VV | 265 | 3602 | 0.10% | 0.044% |
| 178 | 11.977 | 11.937 | 12.009 | VV | 504 | 12000 | 0.34% | 0.145% |
| 179 | 12.033 | 12.009 | 12.115 | VV | 297 | 10895 | 0.31% | 0.132% |
| 180 | 12.136 | 12.115 | 12.161 | VV | 243 | 4938 | 0.14% | 0.060% |
| 181 | 12.174 | 12.161 | 12.187 | VV | 294 | 3442 | 0.10% | 0.042% |
| 182 | 12.208 | 12.187 | 12.241 | VV | 406 | 9782 | 0.28% | 0.118% |
| 183 | 12.260 | 12.241 | 12.305 | VV | 766 | 12273 | 0.35% | 0.148% |
| 184 | 12.337 | 12.305 | 12.368 | VV | 676 | 10167 | 0.29% | 0.123% |
| 185 | 12.398 | 12.368 | 12.485 | VV | 1769 | 30720 | 0.87% | 0.371% |
| 186 | 12.518 | 12.485 | 12.565 | VV | 282 | 5977 | 0.17% | 0.072% |
| 187 | 12.581 | 12.565 | 12.600 | VV | 109 | 1334 | 0.04% | 0.016% |
| 188 | 12.615 | 12.600 | 12.621 | PV | 93 | 692 | 0.02% | 0.008% |
| 189 | 12.650 | 12.621 | 12.705 | VV | 213 | 7065 | 0.20% | 0.085% |
| 190 | 12.725 | 12.705 | 12.735 | VV | 164 | 2124 | 0.06% | 0.026% |
| 191 | 12.840 | 12.735 | 12.982 | VV | 279601 | 3535454 | 100.00% | 42.695% |
| 192 | 13.007 | 12.982 | 13.041 | VV | 835 | 21222 | 0.60% | 0.256% |
| 193 | 13.062 | 13.041 | 13.118 | VV | 512 | 17290 | 0.49% | 0.209% |
| 194 | 13.125 | 13.118 | 13.149 | VV | 275 | 4289 | 0.12% | 0.052% |

rteres

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 195 | 13.162 | 13.149 | 13.185 | VV | 197 | 3555 | 0.10% | 0.043% |
| 196 | 13.202 | 13.185 | 13.239 | VV | 299 | 7969 | 0.23% | 0.096% |
| 197 | 13.280 | 13.239 | 13.371 | VV | 401 | 17889 | 0.51% | 0.216% |
| 198 | 13.393 | 13.371 | 13.411 | VV | 232 | 4322 | 0.12% | 0.052% |
| 199 | 13.445 | 13.411 | 13.487 | VV | 312 | 9282 | 0.26% | 0.112% |
| 200 | 13.542 | 13.487 | 13.571 | VV | 553 | 13520 | 0.38% | 0.163% |
| 201 | 13.594 | 13.571 | 13.755 | VV | 1406 | 30740 | 0.87% | 0.371% |
| 202 | 13.761 | 13.755 | 13.779 | PV | 69 | 714 | 0.02% | 0.009% |
| 203 | 13.848 | 13.779 | 13.882 | VV | 188 | 8274 | 0.23% | 0.100% |
| 204 | 13.889 | 13.882 | 13.905 | VV | 212 | 2001 | 0.06% | 0.024% |
| 205 | 13.913 | 13.905 | 13.965 | VV | 161 | 2773 | 0.08% | 0.033% |
| 206 | 13.995 | 13.965 | 14.109 | VV | 54156 | 119785 | 3.39% | 1.447% |
| 207 | 14.154 | 14.109 | 14.191 | VV | 345 | 8775 | 0.25% | 0.106% |
| 208 | 14.223 | 14.191 | 14.245 | VV | 241 | 5499 | 0.16% | 0.066% |
| 209 | 14.311 | 14.245 | 14.335 | VV | 223 | 8054 | 0.23% | 0.097% |
| 210 | 14.356 | 14.335 | 14.428 | VV | 202 | 9449 | 0.27% | 0.114% |
| 211 | 14.463 | 14.428 | 14.485 | VV | 245 | 6028 | 0.17% | 0.073% |
| 212 | 14.504 | 14.485 | 14.528 | VV | 193 | 3935 | 0.11% | 0.048% |
| 213 | 14.548 | 14.528 | 14.619 | VV | 198 | 8333 | 0.24% | 0.101% |
| 214 | 14.652 | 14.619 | 14.670 | VV | 474 | 8681 | 0.25% | 0.105% |
| 215 | 14.695 | 14.670 | 14.735 | VV | 988 | 19368 | 0.55% | 0.234% |
| 216 | 14.751 | 14.735 | 14.815 | VV | 253 | 6497 | 0.18% | 0.078% |
| 217 | 14.895 | 14.815 | 15.037 | PV | 281 | 19624 | 0.56% | 0.237% |
| 218 | 15.135 | 15.037 | 15.185 | VV | 275 | 18005 | 0.51% | 0.217% |
| 219 | 15.216 | 15.185 | 15.238 | VV | 403 | 8789 | 0.25% | 0.106% |
| 220 | 15.259 | 15.238 | 15.305 | VV | 358 | 9749 | 0.28% | 0.118% |
| 221 | 15.326 | 15.305 | 15.361 | VV | 183 | 5907 | 0.17% | 0.071% |
| 222 | 15.392 | 15.361 | 15.427 | VV | 331 | 10076 | 0.28% | 0.122% |
| 223 | 15.450 | 15.427 | 15.471 | VV | 317 | 6821 | 0.19% | 0.082% |
| 224 | 15.575 | 15.471 | 15.638 | VV | 409 | 28891 | 0.82% | 0.349% |
| 225 | 15.715 | 15.638 | 15.837 | VV | 1083 | 44187 | 1.25% | 0.534% |
| 226 | 15.898 | 15.837 | 15.981 | VV | 345 | 20614 | 0.58% | 0.249% |
| 227 | 16.011 | 15.981 | 16.057 | VV | 260 | 11080 | 0.31% | 0.134% |
| 228 | 16.078 | 16.057 | 16.128 | VV | 319 | 11249 | 0.32% | 0.136% |
| 229 | 16.196 | 16.128 | 16.215 | VV | 414 | 13071 | 0.37% | 0.158% |
| 230 | 16.233 | 16.215 | 16.328 | VV | 307 | 15366 | 0.43% | 0.186% |
| 231 | 16.366 | 16.328 | 16.472 | VV | 278 | 15071 | 0.43% | 0.182% |
| 232 | 16.511 | 16.472 | 16.601 | VV | 270 | 14417 | 0.41% | 0.174% |
| 233 | 16.663 | 16.601 | 16.745 | VV | 964 | 27320 | 0.77% | 0.330% |
| 234 | 16.753 | 16.745 | 16.791 | VV | 103 | 2208 | 0.06% | 0.027% |
| 235 | 16.841 | 16.791 | 16.921 | VV | 152 | 6803 | 0.19% | 0.082% |
| 236 | 16.988 | 16.921 | 17.038 | VV | 148 | 6382 | 0.18% | 0.077% |
| 237 | 17.113 | 17.038 | 17.186 | PV | 744 | 18537 | 0.52% | 0.224% |
| 238 | 17.240 | 17.186 | 17.328 | VV | 177 | 7340 | 0.21% | 0.089% |
| 239 | 17.386 | 17.328 | 17.441 | VV | 159 | 5436 | 0.15% | 0.066% |
| 240 | 17.549 | 17.441 | 17.596 | VV | 1418 | 29456 | 0.83% | 0.356% |
| 241 | 17.623 | 17.596 | 17.655 | VV | 131 | 3618 | 0.10% | 0.044% |
| 242 | 17.711 | 17.655 | 17.780 | VV | 159 | 7809 | 0.22% | 0.094% |
| 243 | 17.831 | 17.780 | 17.875 | PV | 236 | 6377 | 0.18% | 0.077% |
| 244 | 17.972 | 17.875 | 18.067 | VV | 1107 | 26154 | 0.74% | 0.316% |
| 245 | 18.242 | 18.067 | 18.315 | PV | 128 | 7832 | 0.22% | 0.095% |
| 246 | 18.380 | 18.315 | 18.437 | PV | 1549 | 30928 | 0.87% | 0.373% |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | rteres | | | |
| 247 | 18.779 | 18.437 | 18.833 | PV | 1048 | 18417 | 0.52% | 0.222% |
| 248 | 18.962 | 18.833 | 18.988 | PV | 202 | 8202 | 0.23% | 0.099% |
| 249 | 19.165 | 18.988 | 19.215 | VV | 1397 | 43388 | 1.23% | 0.524% |
| 250 | 19.467 | 19.215 | 19.495 | VV | 631 | 59942 | 1.70% | 0.724% |
| 251 | 19.540 | 19.495 | 19.578 | VV | 1186 | 34210 | 0.97% | 0.413% |
| 252 | 19.805 | 19.578 | 19.835 | VV | 1136 | 120319 | 3.40% | 1.453% |
| 253 | 19.906 | 19.835 | 19.948 | VV | 1990 | 92040 | 2.60% | 1.111% |
| 254 | 19.969 | 19.948 | 19.984 | VV | 1483 | 30381 | 0.86% | 0.367% |
| 255 | 20.262 | 19.984 | 20.301 | VV | 2073 | 312390 | 8.84% | 3.772% |
| 256 | 20.432 | 20.301 | 20.468 | VV | 2353 | 208034 | 5.88% | 2.512% |
| 257 | 20.617 | 20.468 | 20.651 | VV | 3097 | 277810 | 7.86% | 3.355% |
| 258 | 20.769 | 20.651 | 20.817 | VV | 2638 | 255660 | 7.23% | 3.087% |
| 259 | 20.950 | 20.817 | 20.988 | VV | 2380 | 240381 | 6.80% | 2.903% |
| 260 | 21.023 | 20.988 | 21.100 | VV | 2229 | 142765 | 4.04% | 1.724% |
| 261 | 21.367 | 21.100 | 21.411 | VV | 1726 | 339106 | 9.59% | 4.095% |
| 262 | 21.472 | 21.411 | 21.514 | VV | 1874 | 102982 | 2.91% | 1.244% |
| 263 | 21.537 | 21.514 | 21.665 | VV | 1500 | 117652 | 3.33% | 1.421% |
| 264 | 21.739 | 21.665 | 21.877 | VV | 1091 | 121113 | 3.43% | 1.463% |
| 265 | 21.928 | 21.877 | 22.001 | VV | 671 | 42817 | 1.21% | 0.517% |
| 266 | 22.017 | 22.001 | 22.045 | VV | 461 | 10584 | 0.30% | 0.128% |
| 267 | 22.066 | 22.045 | 22.098 | VV | 380 | 10286 | 0.29% | 0.124% |
| 268 | 22.131 | 22.098 | 22.157 | VV | 245 | 8156 | 0.23% | 0.098% |
| 269 | 22.174 | 22.157 | 22.205 | VV | 153 | 3231 | 0.09% | 0.039% |
| | | | Sum of corrected areas: | | | 8280782 | | |

Aliphatic EPH 021125.M Fri Feb 28 01:16:26 2025

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Weston Solutions, Inc. | Date Collected: | 02/24/25 |
| Project: | RFP 905 | Date Received: | 02/24/25 |
| Client Sample ID: | P001-CLAY-CF02-01 | SDG No.: | Q1421 |
| Lab Sample ID: | Q1421-10 | Matrix: | Water |
| Analytical Method: | NJEPH | % Solid: | 0 |
| Sample Wt/Vol: | 1000 Units: mL | Final Vol: | 2000 uL |
| Soil Aliquot Vol: | uL | Test: | EPH |
| Prep Method : | SW3510 | | |

| File ID : | Dilution: | Prep Date : | Date Analyzed : | Prep Batch ID |
|---|---|---|---|---|
| FD049124.D | 1 | 02/26/25 | 02/27/25 | PB166883 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| Aromatic C10-C12 | Aromatic C10-C12 | 9.81 | J | 3.32 | 20.0 | ug/l |
| Aromatic C12-C16 | Aromatic C12-C16 | 14.1 | J | 3.69 | 30.0 | ug/l |
| Aromatic C16-C21 | Aromatic C16-C21 | 41.8 | J | 12.7 | 50.0 | ug/l |
| Aromatic C21-C36 | Aromatic C21-C36 | 87.2 | | 25.2 | 80.0 | ug/l |
| **SURROGATES** | | | | | | |
| 580-13-2 | 2-Bromonaphthalene (SURR) | 53.0 | | 40 - 140 | 106% | SPK: 50 |
| 321-60-8 | 2-Flurobiphenyl (SURR) | 54.2 | | 40 - 140 | 108% | SPK: 50 |
| 84-15-1 | ortho-Terphenyl (SURR) | 46.0 | | 40 - 140 | 92% | SPK: 50 |

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

# Quantitation Report For Aromatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | Q1421-10 | Acq On: | 27 Feb 2025 15:53 |
| Client Sample ID: | P001-CLAY-CF02-01 | Operator: | YP/AJ |
| Data file: | FD049124.D | Misc: | |
| Instrument: | FID_D | ALS Vial: | 68 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aromatic C10-C12 | 4.076 | 5.794 | 779914 | 4.904 | 200 | ug/ml |
| Aromatic C12-C16 | 5.795 | 8.397 | 1134516 | 7.049 | 300 | ug/ml |
| Aromatic C16-C21 | 8.398 | 12.661 | 3206255 | 20.907 | 500 | ug/ml |
| Aromatic C21-C36 | 12.662 | 18.071 | 6242405 | 43.618 | 800 | ug/ml |
| Aromatic EPH | 4.076 | 18.071 | 11363090 | 76.479 | | ug/ml |
| 2-Bromonaphthalene (SURR) | 7.352 | 7.352 | 7587165 | 53.02 | | ug/ml |
| 2-Flurobiphenyl (SURR) | 8.202 | 8.202 | 4761886 | 54.17 | | ug/ml |
| ortho-Terphenyl (SURR) | 11.236 | 11.236 | 7448477 | 46.04 | | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022725AR\
Data File : FD049124.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2025 15:53
Operator : YP/AJ
Sample : Q1421-10
Misc :
ALS Vial : 68 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF02-01

Integration File: autoint1.e
Quant Time: Feb 28 01:28:41 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

| Compound | R.T. | Response | Conc Units |
|---|---|---|---|
| **System Monitoring Compounds** | | | |
| 4) S 2-Bromonaphthalene (S... | 7.352 | 7587165 | 53.017 ug/ml |
| Spiked Amount 50.000 | | Recovery = 106.03% | |
| 6) S 2-Flurobiphenyl (SURR) | 8.202 | 4761886 | 54.167 ug/ml |
| Spiked Amount 50.000 Range 0 - 131 | | Recovery = 108.33% | |
| 11) S ortho-Terphenyl (SURR) | 11.236 | 7448477 | 46.042 ug/ml |
| Spiked Amount 50.000 | | Recovery = 92.08% | |
| **Target Compounds** | | | |

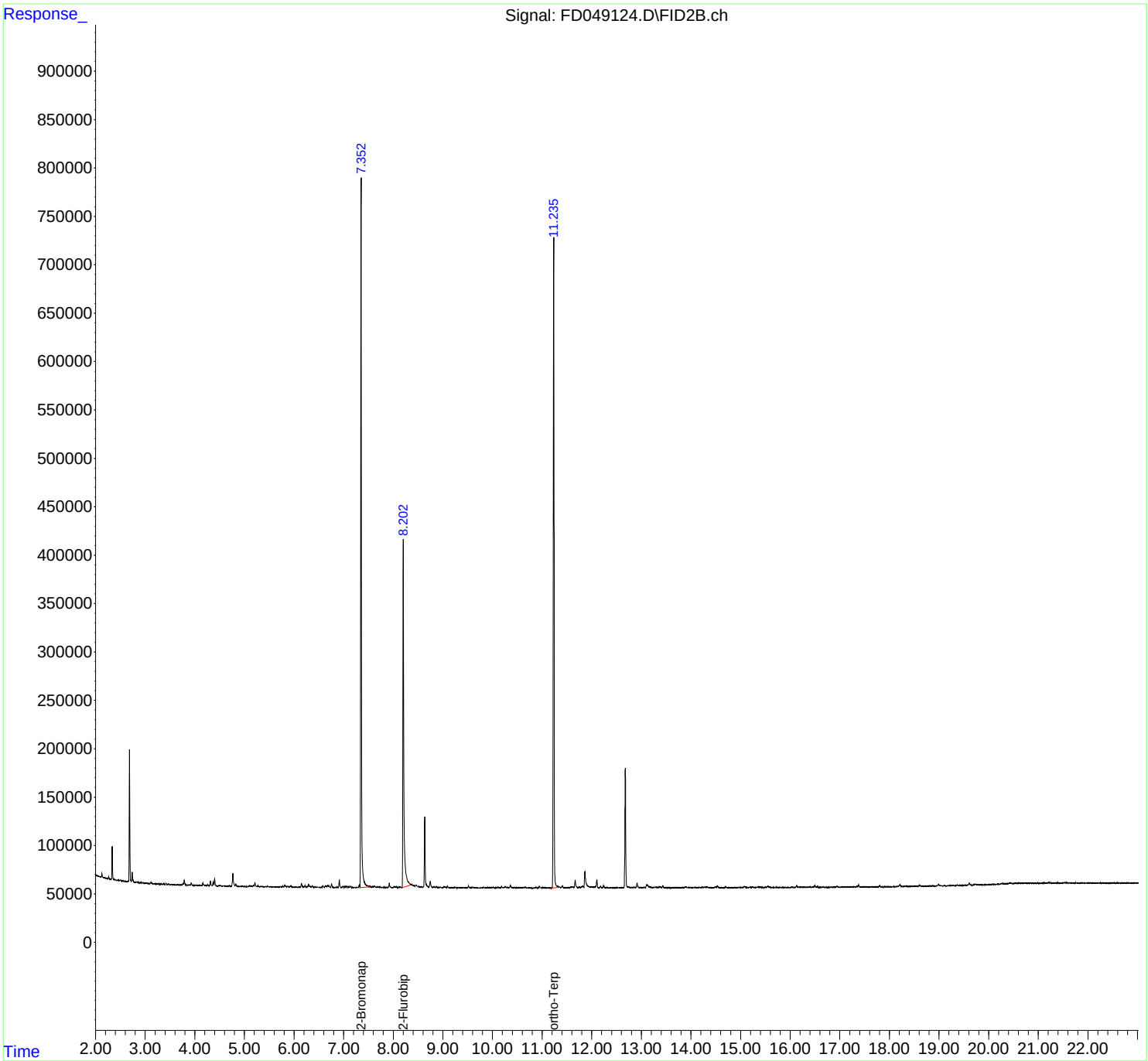
(f)=RT Delta > 1/2 Window (m)=manual int.

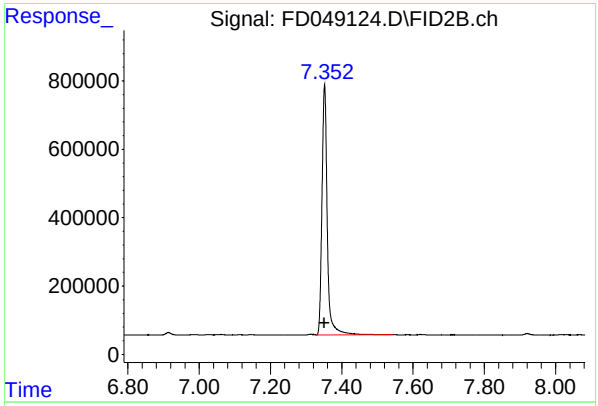
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022725AR\
Data File : FD049124.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2025 15:53
Operator : YP/AJ
Sample : Q1421-10
Misc :
ALS Vial : 68 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF02-01

Integration File: autoint1.e
Quant Time: Feb 28 01:28:41 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

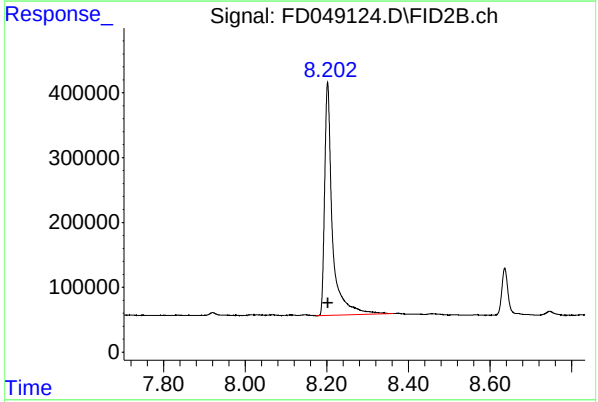





#4 2-Bromonaphthalene (SURR)

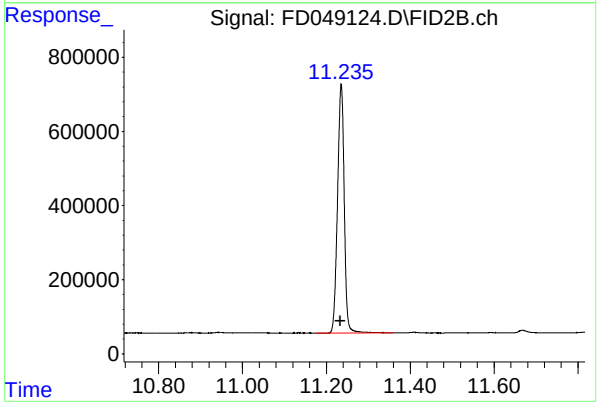
R.T.: 7.352 min
Delta R.T.: 0.000 min
Response: 7587165
Conc: 53.02 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF02-01




#6 2-Flurobiphenyl (SURR)

R.T.: 8.202 min
Delta R.T.: 0.000 min
Response: 4761886
Conc: 54.17 ug/ml




#11 ortho-Terphenyl (SURR)

R.T.: 11.236 min
Delta R.T.: 0.002 min
Response: 7448477
Conc: 46.04 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022725AR\
Data File : FD049124.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2025 15:53
Sample : Q1421-10
Misc :
ALS Vial : 68 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Title : GC Extractables

Signal : FID2B.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 4.053 | 4.042 | 4.069 | BV | 296 | 1807 | 0.02% | 0.006% |
| 2 | 4.090 | 4.082 | 4.121 | VV | 266 | 4291 | 0.06% | 0.014% |
| 3 | 4.161 | 4.144 | 4.204 | VV | 2444 | 38820 | 0.51% | 0.122% |
| 4 | 4.209 | 4.204 | 4.214 | VV | 453 | 1996 | 0.03% | 0.006% |
| 5 | 4.216 | 4.214 | 4.239 | VV | 444 | 3584 | 0.05% | 0.011% |
| 6 | 4.261 | 4.239 | 4.295 | VV | 1020 | 14121 | 0.18% | 0.045% |
| 7 | 4.315 | 4.295 | 4.349 | VV | 4875 | 56474 | 0.74% | 0.178% |
| 8 | 4.370 | 4.349 | 4.384 | VV | 4121 | 43083 | 0.56% | 0.136% |
| 9 | 4.399 | 4.384 | 4.459 | VV | 7263 | 86303 | 1.13% | 0.272% |
| 10 | 4.464 | 4.459 | 4.476 | VV | 255 | 1993 | 0.03% | 0.006% |
| 11 | 4.511 | 4.476 | 4.541 | VV | 902 | 17508 | 0.23% | 0.055% |
| 12 | 4.545 | 4.541 | 4.559 | VV | 121 | 1031 | 0.01% | 0.003% |
| 13 | 4.582 | 4.565 | 4.588 | VV | 481 | 4320 | 0.06% | 0.014% |
| 14 | 4.592 | 4.588 | 4.598 | VV | 465 | 2316 | 0.03% | 0.007% |
| 15 | 4.604 | 4.598 | 4.610 | VV | 308 | 2253 | 0.03% | 0.007% |
| 16 | 4.612 | 4.610 | 4.668 | VV | 269 | 2617 | 0.03% | 0.008% |
| 17 | 4.692 | 4.668 | 4.721 | PV | 747 | 9544 | 0.12% | 0.030% |
| 18 | 4.768 | 4.721 | 4.811 | VV | 13616 | 191154 | 2.50% | 0.603% |
| 19 | 4.827 | 4.811 | 4.876 | VV | 2715 | 37323 | 0.49% | 0.118% |
| 20 | 4.889 | 4.876 | 4.895 | VV | 178 | 1506 | 0.02% | 0.005% |
| 21 | 4.966 | 4.920 | 5.027 | VV | 638 | 16961 | 0.22% | 0.053% |
| 22 | 5.030 | 5.027 | 5.048 | VV | 240 | 1688 | 0.02% | 0.005% |
| 23 | 5.064 | 5.048 | 5.070 | PV | 245 | 1945 | 0.03% | 0.006% |
| 24 | 5.100 | 5.070 | 5.114 | VV | 944 | 16681 | 0.22% | 0.053% |
| 25 | 5.118 | 5.114 | 5.126 | VV | 824 | 5242 | 0.07% | 0.017% |
| 26 | 5.138 | 5.126 | 5.165 | VV | 1019 | 16399 | 0.21% | 0.052% |
| 27 | 5.182 | 5.165 | 5.196 | VV | 1846 | 23054 | 0.30% | 0.073% |
| 28 | 5.212 | 5.196 | 5.238 | VV | 4314 | 52530 | 0.69% | 0.166% |
| 29 | 5.246 | 5.238 | 5.252 | VV | 656 | 4696 | 0.06% | 0.015% |
| 30 | 5.269 | 5.252 | 5.304 | VV | 1409 | 23538 | 0.31% | 0.074% |
| 31 | 5.325 | 5.304 | 5.359 | VV | 546 | 13802 | 0.18% | 0.044% |
| 32 | 5.363 | 5.359 | 5.369 | VV | 472 | 2105 | 0.03% | 0.007% |
| 33 | 5.373 | 5.369 | 5.383 | VV | 302 | 1781 | 0.02% | 0.006% |
| 34 | 5.395 | 5.383 | 5.405 | VV | 355 | 3338 | 0.04% | 0.011% |
| 35 | 5.419 | 5.405 | 5.446 | VV | 448 | 7051 | 0.09% | 0.022% |
| 36 | 5.462 | 5.446 | 5.502 | VV | 856 | 15373 | 0.20% | 0.048% |

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|---|---|---|---|---|---|---|---|---|
| 37 | 5.521 | 5.502 | 5.544 | VV | 404 | 6845 | 0.09% | 0.022% |
| 38 | 5.560 | 5.554 | 5.571 | VV | 315 | 1676 | 0.02% | 0.005% |
| 39 | 5.581 | 5.571 | 5.600 | VV | 247 | 2123 | 0.03% | 0.007% |
| 40 | 5.612 | 5.600 | 5.616 | VV | 305 | 1760 | 0.02% | 0.006% |
| 41 | 5.631 | 5.616 | 5.642 | VV | 430 | 4674 | 0.06% | 0.015% |
| 42 | 5.653 | 5.642 | 5.662 | VV | 378 | 3836 | 0.05% | 0.012% |
| 43 | 5.684 | 5.662 | 5.700 | VV | 398 | 5980 | 0.08% | 0.019% |
| 44 | 5.717 | 5.700 | 5.723 | PV | 519 | 4678 | 0.06% | 0.015% |
| 45 | 5.728 | 5.723 | 5.752 | VV | 638 | 7445 | 0.10% | 0.023% |
| 46 | 5.772 | 5.752 | 5.794 | VV | 1028 | 14476 | 0.19% | 0.046% |
| 47 | 5.812 | 5.794 | 5.853 | VV | 2501 | 39863 | 0.52% | 0.126% |
| 48 | 5.871 | 5.853 | 5.899 | VV | 1136 | 19432 | 0.25% | 0.061% |
| 49 | 5.904 | 5.899 | 5.912 | VV | 568 | 3904 | 0.05% | 0.012% |
| 50 | 5.938 | 5.912 | 6.000 | VV | 1291 | 33281 | 0.44% | 0.105% |
| 51 | 6.007 | 6.000 | 6.029 | VV | 405 | 4277 | 0.06% | 0.013% |
| 52 | 6.050 | 6.037 | 6.057 | VV | 314 | 2588 | 0.03% | 0.008% |
| 53 | 6.063 | 6.057 | 6.081 | VV | 300 | 3973 | 0.05% | 0.013% |
| 54 | 6.094 | 6.081 | 6.110 | VV | 317 | 3375 | 0.04% | 0.011% |
| 55 | 6.151 | 6.121 | 6.201 | VV | 4172 | 64538 | 0.85% | 0.203% |
| 56 | 6.221 | 6.201 | 6.243 | VV | 1947 | 24482 | 0.32% | 0.077% |
| 57 | 6.266 | 6.243 | 6.277 | VV | 1297 | 16271 | 0.21% | 0.051% |
| 58 | 6.293 | 6.277 | 6.314 | VV | 3504 | 44630 | 0.58% | 0.141% |
| 59 | 6.322 | 6.314 | 6.346 | VV | 1046 | 13645 | 0.18% | 0.043% |
| 60 | 6.367 | 6.346 | 6.401 | VV | 1878 | 27004 | 0.35% | 0.085% |
| 61 | 6.413 | 6.401 | 6.448 | VV | 403 | 5815 | 0.08% | 0.018% |
| 62 | 6.457 | 6.448 | 6.475 | VV | 328 | 3871 | 0.05% | 0.012% |
| 63 | 6.502 | 6.475 | 6.523 | VV | 452 | 6047 | 0.08% | 0.019% |
| 64 | 6.530 | 6.523 | 6.538 | VV | 308 | 1870 | 0.02% | 0.006% |
| 65 | 6.550 | 6.538 | 6.559 | VV | 379 | 3167 | 0.04% | 0.010% |
| 66 | 6.580 | 6.559 | 6.612 | VV | 1955 | 25483 | 0.33% | 0.080% |
| 67 | 6.633 | 6.612 | 6.654 | VV | 1742 | 31512 | 0.41% | 0.099% |
| 68 | 6.679 | 6.654 | 6.692 | VV | 2283 | 36850 | 0.48% | 0.116% |
| 69 | 6.703 | 6.692 | 6.734 | VV | 1684 | 23867 | 0.31% | 0.075% |
| 70 | 6.758 | 6.734 | 6.788 | VV | 3769 | 48956 | 0.64% | 0.154% |
| 71 | 6.792 | 6.788 | 6.801 | VV | 399 | 1690 | 0.02% | 0.005% |
| 72 | 6.831 | 6.814 | 6.837 | VV | 367 | 3336 | 0.04% | 0.011% |
| 73 | 6.856 | 6.837 | 6.876 | VV | 805 | 9928 | 0.13% | 0.031% |
| 74 | 6.913 | 6.876 | 6.957 | VV | 7719 | 90485 | 1.19% | 0.285% |
| 75 | 6.987 | 6.957 | 7.010 | VV | 1237 | 25196 | 0.33% | 0.079% |
| 76 | 7.025 | 7.010 | 7.044 | VV | 1451 | 20181 | 0.26% | 0.064% |
| 77 | 7.062 | 7.044 | 7.087 | VV | 1823 | 27134 | 0.36% | 0.086% |
| 78 | 7.094 | 7.087 | 7.102 | VV | 865 | 5807 | 0.08% | 0.018% |
| 79 | 7.115 | 7.102 | 7.132 | VV | 1193 | 14860 | 0.19% | 0.047% |
| 80 | 7.146 | 7.132 | 7.172 | VV | 1507 | 17220 | 0.23% | 0.054% |
| 81 | 7.180 | 7.172 | 7.204 | VV | 238 | 3865 | 0.05% | 0.012% |
| 82 | 7.210 | 7.204 | 7.236 | VV | 447 | 3983 | 0.05% | 0.013% |
| 83 | 7.265 | 7.244 | 7.275 | VV | 378 | 3969 | 0.05% | 0.013% |
| 84 | 7.279 | 7.275 | 7.286 | VV | 260 | 1206 | 0.02% | 0.004% |
| 85 | 7.314 | 7.286 | 7.328 | VV | 2769 | 30003 | 0.39% | 0.095% |
| 86 | 7.352 | 7.328 | 7.502 | VV | 732923 | 7634924 | 100.00% | 24.069% |
| 87 | 7.506 | 7.502 | 7.514 | VV | 1626 | 10982 | 0.14% | 0.035% |
| 88 | 7.518 | 7.514 | 7.566 | VV | 1462 | 33053 | 0.43% | 0.104% |
| 89 | 7.585 | 7.566 | 7.604 | VV | 1091 | 19268 | 0.25% | 0.061% |

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|---|---|---|---|---|---|---|---|---|
| 90 | 7.621 | 7.604 | 7.666 | VV | 1906 | 35475 | 0.46% | 0.112% |
| 91 | 7.680 | 7.666 | 7.694 | VV | 924 | 11042 | 0.14% | 0.035% |
| 92 | 7.709 | 7.694 | 7.744 | VV | 1015 | 20219 | 0.26% | 0.064% |
| 93 | 7.747 | 7.744 | 7.775 | VV | 477 | 6418 | 0.08% | 0.020% |
| 94 | 7.780 | 7.775 | 7.784 | VV | 315 | 1461 | 0.02% | 0.005% |
| 95 | 7.792 | 7.784 | 7.797 | VV | 435 | 2676 | 0.04% | 0.008% |
| 96 | 7.803 | 7.797 | 7.821 | VV | 568 | 4582 | 0.06% | 0.014% |
| 97 | 7.837 | 7.821 | 7.855 | VV | 675 | 8683 | 0.11% | 0.027% |
| 98 | 7.863 | 7.855 | 7.888 | VV | 497 | 7166 | 0.09% | 0.023% |
| 99 | 7.894 | 7.888 | 7.900 | VV | 419 | 2888 | 0.04% | 0.009% |
| 100 | 7.920 | 7.900 | 7.992 | VV | 4735 | 69205 | 0.91% | 0.218% |
| 101 | 8.017 | 7.992 | 8.024 | VV | 1330 | 14220 | 0.19% | 0.045% |
| 102 | 8.029 | 8.024 | 8.052 | VV | 1211 | 16634 | 0.22% | 0.052% |
| 103 | 8.068 | 8.052 | 8.089 | VV | 1202 | 16646 | 0.22% | 0.052% |
| 104 | 8.112 | 8.089 | 8.132 | VV | 1114 | 16564 | 0.22% | 0.052% |
| 105 | 8.147 | 8.132 | 8.177 | VV | 1357 | 16171 | 0.21% | 0.051% |
| 106 | 8.202 | 8.177 | 8.363 | VV | 360096 | 4949122 | 64.82% | 15.602% |
| 107 | 8.375 | 8.363 | 8.404 | VV | 3596 | 73599 | 0.96% | 0.232% |
| 108 | 8.409 | 8.404 | 8.419 | VV | 2509 | 21165 | 0.28% | 0.067% |
| 109 | 8.427 | 8.419 | 8.440 | VV | 2271 | 27987 | 0.37% | 0.088% |
| 110 | 8.458 | 8.440 | 8.504 | VV | 3155 | 80555 | 1.06% | 0.254% |
| 111 | 8.516 | 8.504 | 8.529 | VV | 1546 | 19880 | 0.26% | 0.063% |
| 112 | 8.568 | 8.529 | 8.601 | VV | 1335 | 39457 | 0.52% | 0.124% |
| 113 | 8.636 | 8.601 | 8.685 | VV | 73403 | 815741 | 10.68% | 2.572% |
| 114 | 8.688 | 8.685 | 8.719 | VV | 2026 | 27881 | 0.37% | 0.088% |
| 115 | 8.746 | 8.719 | 8.785 | VV | 6838 | 115342 | 1.51% | 0.364% |
| 116 | 8.791 | 8.785 | 8.805 | VV | 815 | 8885 | 0.12% | 0.028% |
| 117 | 8.823 | 8.805 | 8.850 | VV | 1629 | 27455 | 0.36% | 0.087% |
| 118 | 8.870 | 8.850 | 8.897 | VV | 1278 | 24642 | 0.32% | 0.078% |
| 119 | 8.902 | 8.897 | 8.916 | VV | 675 | 6344 | 0.08% | 0.020% |
| 120 | 8.929 | 8.916 | 8.933 | VV | 669 | 6140 | 0.08% | 0.019% |
| 121 | 8.942 | 8.933 | 8.961 | VV | 770 | 11034 | 0.14% | 0.035% |
| 122 | 8.965 | 8.961 | 8.970 | VV | 456 | 2228 | 0.03% | 0.007% |
| 123 | 8.975 | 8.970 | 8.985 | VV | 453 | 3279 | 0.04% | 0.010% |
| 124 | 9.021 | 8.985 | 9.030 | VV | 1181 | 18803 | 0.25% | 0.059% |
| 125 | 9.040 | 9.030 | 9.075 | VV | 1098 | 18233 | 0.24% | 0.057% |
| 126 | 9.097 | 9.075 | 9.122 | VV | 1796 | 26990 | 0.35% | 0.085% |
| 127 | 9.127 | 9.122 | 9.150 | VV | 420 | 4651 | 0.06% | 0.015% |
| 128 | 9.161 | 9.150 | 9.165 | VV | 320 | 2042 | 0.03% | 0.006% |
| 129 | 9.176 | 9.165 | 9.189 | VV | 354 | 4885 | 0.06% | 0.015% |
| 130 | 9.196 | 9.189 | 9.226 | VV | 397 | 5206 | 0.07% | 0.016% |
| 131 | 9.246 | 9.226 | 9.270 | PV | 1006 | 13356 | 0.17% | 0.042% |
| 132 | 9.280 | 9.270 | 9.285 | VV | 220 | 1385 | 0.02% | 0.004% |
| 133 | 9.296 | 9.285 | 9.302 | VV | 599 | 3237 | 0.04% | 0.010% |
| 134 | 9.307 | 9.302 | 9.325 | VV | 466 | 5334 | 0.07% | 0.017% |
| 135 | 9.344 | 9.325 | 9.360 | VV | 512 | 6964 | 0.09% | 0.022% |
| 136 | 9.389 | 9.360 | 9.397 | VV | 479 | 7835 | 0.10% | 0.025% |
| 137 | 9.400 | 9.397 | 9.409 | VV | 467 | 2805 | 0.04% | 0.009% |
| 138 | 9.414 | 9.409 | 9.420 | VV | 385 | 1874 | 0.02% | 0.006% |
| 139 | 9.447 | 9.420 | 9.465 | VV | 550 | 8640 | 0.11% | 0.027% |
| 140 | 9.469 | 9.465 | 9.482 | VV | 222 | 1590 | 0.02% | 0.005% |
| 141 | 9.491 | 9.482 | 9.499 | VV | 255 | 1704 | 0.02% | 0.005% |

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|---|---|---|---|---|---|---|---|---|
| 142 | 9.517 | 9.499 | 9.540 | VV | 2122 | 26606 | 0.35% | 0.084% |
| 143 | 9.547 | 9.540 | 9.565 | VV | 461 | 5494 | 0.07% | 0.017% |
| 144 | 9.586 | 9.565 | 9.602 | VV | 832 | 13495 | 0.18% | 0.043% |
| 145 | 9.607 | 9.602 | 9.626 | VV | 667 | 7685 | 0.10% | 0.024% |
| 146 | 9.630 | 9.626 | 9.634 | VV | 399 | 1819 | 0.02% | 0.006% |
| 147 | 9.650 | 9.634 | 9.676 | VV | 595 | 8406 | 0.11% | 0.026% |
| 148 | 9.687 | 9.676 | 9.712 | VV | 386 | 4405 | 0.06% | 0.014% |
| 149 | 9.764 | 9.749 | 9.769 | VV | 387 | 3265 | 0.04% | 0.010% |
| 150 | 9.784 | 9.769 | 9.799 | VV | 642 | 7634 | 0.10% | 0.024% |
| 151 | 9.822 | 9.799 | 9.862 | VV | 1028 | 19716 | 0.26% | 0.062% |
| 152 | 9.865 | 9.862 | 9.874 | VV | 279 | 1653 | 0.02% | 0.005% |
| 153 | 9.879 | 9.874 | 9.881 | VV | 375 | 1264 | 0.02% | 0.004% |
| 154 | 9.889 | 9.881 | 9.895 | VV | 617 | 4169 | 0.05% | 0.013% |
| 155 | 9.904 | 9.895 | 9.917 | VV | 839 | 9202 | 0.12% | 0.029% |
| 156 | 9.929 | 9.917 | 9.946 | VV | 761 | 10483 | 0.14% | 0.033% |
| 157 | 9.955 | 9.946 | 9.981 | VV | 671 | 11047 | 0.14% | 0.035% |
| 158 | 9.989 | 9.981 | 9.997 | VV | 627 | 4745 | 0.06% | 0.015% |
| 159 | 10.013 | 9.997 | 10.036 | VV | 1231 | 15268 | 0.20% | 0.048% |
| 160 | 10.056 | 10.036 | 10.065 | VV | 383 | 4719 | 0.06% | 0.015% |
| 161 | 10.070 | 10.065 | 10.075 | VV | 381 | 2013 | 0.03% | 0.006% |
| 162 | 10.104 | 10.075 | 10.120 | VV | 1222 | 17948 | 0.24% | 0.057% |
| 163 | 10.139 | 10.120 | 10.162 | VV | 910 | 13308 | 0.17% | 0.042% |
| 164 | 10.183 | 10.162 | 10.205 | VV | 1473 | 23772 | 0.31% | 0.075% |
| 165 | 10.220 | 10.205 | 10.232 | VV | 694 | 9792 | 0.13% | 0.031% |
| 166 | 10.257 | 10.232 | 10.282 | VV | 1604 | 29414 | 0.39% | 0.093% |
| 167 | 10.292 | 10.282 | 10.314 | VV | 1020 | 14175 | 0.19% | 0.045% |
| 168 | 10.326 | 10.314 | 10.339 | VV | 827 | 11051 | 0.14% | 0.035% |
| 169 | 10.363 | 10.339 | 10.389 | VV | 2977 | 45538 | 0.60% | 0.144% |
| 170 | 10.398 | 10.389 | 10.405 | VV | 544 | 4520 | 0.06% | 0.014% |
| 171 | 10.410 | 10.405 | 10.443 | VV | 599 | 10333 | 0.14% | 0.033% |
| 172 | 10.456 | 10.443 | 10.485 | VV | 733 | 13492 | 0.18% | 0.043% |
| 173 | 10.489 | 10.485 | 10.514 | VV | 630 | 7554 | 0.10% | 0.024% |
| 174 | 10.521 | 10.514 | 10.538 | VV | 504 | 6526 | 0.09% | 0.021% |
| 175 | 10.543 | 10.538 | 10.556 | VV | 505 | 4507 | 0.06% | 0.014% |
| 176 | 10.563 | 10.556 | 10.579 | VV | 481 | 5582 | 0.07% | 0.018% |
| 177 | 10.589 | 10.579 | 10.596 | VV | 432 | 3617 | 0.05% | 0.011% |
| 178 | 10.604 | 10.596 | 10.621 | VV | 617 | 7134 | 0.09% | 0.022% |
| 179 | 10.635 | 10.621 | 10.647 | VV | 796 | 9594 | 0.13% | 0.030% |
| 180 | 10.661 | 10.647 | 10.681 | VV | 1462 | 18617 | 0.24% | 0.059% |
| 181 | 10.700 | 10.681 | 10.715 | VV | 665 | 9396 | 0.12% | 0.030% |
| 182 | 10.722 | 10.715 | 10.727 | VV | 387 | 2670 | 0.03% | 0.008% |
| 183 | 10.748 | 10.727 | 10.764 | VV | 525 | 8597 | 0.11% | 0.027% |
| 184 | 10.770 | 10.764 | 10.784 | VV | 382 | 2486 | 0.03% | 0.008% |
| 185 | 10.803 | 10.794 | 10.812 | VV | 238 | 1666 | 0.02% | 0.005% |
| 186 | 10.817 | 10.812 | 10.844 | PV | 160 | 2817 | 0.04% | 0.009% |
| 187 | 10.854 | 10.844 | 10.859 | VV | 384 | 2649 | 0.03% | 0.008% |
| 188 | 10.878 | 10.859 | 10.913 | VV | 1250 | 20818 | 0.27% | 0.066% |
| 189 | 10.943 | 10.913 | 10.977 | VV | 2209 | 37559 | 0.49% | 0.118% |
| 190 | 10.993 | 10.977 | 11.006 | VV | 761 | 11493 | 0.15% | 0.036% |
| 191 | 11.013 | 11.006 | 11.022 | VV | 707 | 5982 | 0.08% | 0.019% |
| 192 | 11.027 | 11.022 | 11.035 | VV | 728 | 4832 | 0.06% | 0.015% |
| 193 | 11.041 | 11.035 | 11.079 | VV | 690 | 12444 | 0.16% | 0.039% |
| 194 | 11.090 | 11.079 | 11.115 | VV | 421 | 6350 | 0.08% | 0.020% |

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|---|---|---|---|---|---|---|---|---|
| 195 | 11.135 | 11.115 | 11.140 | VV | 571 | 5454 | 0.07% | 0.017% |
| 196 | 11.147 | 11.140 | 11.153 | VV | 381 | 2668 | 0.03% | 0.008% |
| 197 | 11.159 | 11.153 | 11.169 | VV | 449 | 3405 | 0.04% | 0.011% |
| 198 | 11.173 | 11.169 | 11.202 | VV | 330 | 3877 | 0.05% | 0.012% |
| 199 | 11.236 | 11.202 | 11.310 | VV | 671781 | 7472001 | 97.87% | 23.556% |
| 200 | 11.317 | 11.310 | 11.345 | VV | 1950 | 32275 | 0.42% | 0.102% |
| 201 | 11.352 | 11.345 | 11.389 | VV | 1159 | 25490 | 0.33% | 0.080% |
| 202 | 11.409 | 11.389 | 11.449 | VV | 2373 | 42521 | 0.56% | 0.134% |
| 203 | 11.458 | 11.449 | 11.477 | VV | 575 | 8365 | 0.11% | 0.026% |
| 204 | 11.506 | 11.477 | 11.515 | VV | 801 | 14351 | 0.19% | 0.045% |
| 205 | 11.523 | 11.515 | 11.529 | VV | 777 | 6152 | 0.08% | 0.019% |
| 206 | 11.533 | 11.529 | 11.549 | VV | 714 | 7664 | 0.10% | 0.024% |
| 207 | 11.574 | 11.549 | 11.580 | VV | 1254 | 19417 | 0.25% | 0.061% |
| 208 | 11.593 | 11.580 | 11.612 | VV | 1496 | 23790 | 0.31% | 0.075% |
| 209 | 11.634 | 11.612 | 11.644 | VV | 1251 | 22217 | 0.29% | 0.070% |
| 210 | 11.668 | 11.644 | 11.722 | VV | 7963 | 138081 | 1.81% | 0.435% |
| 211 | 11.738 | 11.722 | 11.748 | VV | 1219 | 16046 | 0.21% | 0.051% |
| 212 | 11.756 | 11.748 | 11.769 | VV | 1170 | 13116 | 0.17% | 0.041% |
| 213 | 11.774 | 11.769 | 11.783 | VV | 966 | 6784 | 0.09% | 0.021% |
| 214 | 11.814 | 11.783 | 11.844 | VV | 2345 | 56591 | 0.74% | 0.178% |
| 215 | 11.864 | 11.844 | 11.964 | VV | 17295 | 372811 | 4.88% | 1.175% |
| 216 | 11.968 | 11.964 | 11.977 | VV | 1480 | 11090 | 0.15% | 0.035% |
| 217 | 11.981 | 11.977 | 11.992 | VV | 1478 | 12894 | 0.17% | 0.041% |
| 218 | 11.997 | 11.992 | 12.001 | VV | 1533 | 7344 | 0.10% | 0.023% |
| 219 | 12.015 | 12.001 | 12.057 | VV | 1476 | 42168 | 0.55% | 0.133% |
| 220 | 12.103 | 12.057 | 12.149 | VV | 8495 | 149794 | 1.96% | 0.472% |
| 221 | 12.179 | 12.149 | 12.212 | VV | 2152 | 40750 | 0.53% | 0.128% |
| 222 | 12.241 | 12.212 | 12.265 | VV | 2939 | 47070 | 0.62% | 0.148% |
| 223 | 12.271 | 12.265 | 12.289 | VV | 873 | 10640 | 0.14% | 0.034% |
| 224 | 12.314 | 12.289 | 12.334 | VV | 1041 | 20463 | 0.27% | 0.065% |
| 225 | 12.339 | 12.334 | 12.343 | VV | 570 | 2751 | 0.04% | 0.009% |
| 226 | 12.354 | 12.343 | 12.360 | VV | 646 | 6074 | 0.08% | 0.019% |
| 227 | 12.362 | 12.360 | 12.365 | VV | 751 | 1939 | 0.03% | 0.006% |
| 228 | 12.374 | 12.365 | 12.429 | VV | 787 | 23865 | 0.31% | 0.075% |
| 229 | 12.455 | 12.429 | 12.477 | VV | 687 | 15056 | 0.20% | 0.047% |
| 230 | 12.495 | 12.477 | 12.511 | VV | 910 | 14384 | 0.19% | 0.045% |
| 231 | 12.517 | 12.511 | 12.548 | VV | 970 | 15276 | 0.20% | 0.048% |
| 232 | 12.554 | 12.548 | 12.575 | VV | 811 | 10028 | 0.13% | 0.032% |
| 233 | 12.581 | 12.575 | 12.585 | VV | 602 | 3004 | 0.04% | 0.009% |
| 234 | 12.604 | 12.585 | 12.611 | VV | 964 | 12174 | 0.16% | 0.038% |
| 235 | 12.615 | 12.611 | 12.622 | VV | 764 | 4800 | 0.06% | 0.015% |
| 236 | 12.638 | 12.622 | 12.645 | VV | 965 | 10746 | 0.14% | 0.034% |
| 237 | 12.677 | 12.645 | 12.728 | VV | 124278 | 1525913 | 19.99% | 4.811% |
| 238 | 12.741 | 12.728 | 12.772 | VV | 1597 | 33103 | 0.43% | 0.104% |
| 239 | 12.776 | 12.772 | 12.795 | VV | 888 | 10961 | 0.14% | 0.035% |
| 240 | 12.804 | 12.795 | 12.822 | VV | 974 | 14594 | 0.19% | 0.046% |
| 241 | 12.831 | 12.822 | 12.844 | VV | 1029 | 12417 | 0.16% | 0.039% |
| 242 | 12.851 | 12.844 | 12.856 | VV | 1247 | 8312 | 0.11% | 0.026% |
| 243 | 12.862 | 12.856 | 12.887 | VV | 1103 | 18057 | 0.24% | 0.057% |
| 244 | 12.916 | 12.887 | 12.981 | VV | 5365 | 113669 | 1.49% | 0.358% |
| 245 | 12.996 | 12.981 | 13.010 | VV | 917 | 14501 | 0.19% | 0.046% |
| 246 | 13.051 | 13.010 | 13.085 | VV | 1276 | 44469 | 0.58% | 0.140% |

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| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 247 | 13.111 | 13.085 | 13.164 | VV | 3834 | 117559 | 1.54% | 0.371% |
| 248 | 13.171 | 13.164 | 13.212 | VV | 1746 | 38920 | 0.51% | 0.123% |
| 249 | 13.230 | 13.212 | 13.246 | VV | 1179 | 20705 | 0.27% | 0.065% |
| 250 | 13.265 | 13.246 | 13.286 | VV | 1254 | 26410 | 0.35% | 0.083% |
| 251 | 13.308 | 13.286 | 13.324 | VV | 2013 | 25347 | 0.33% | 0.080% |
| 252 | 13.337 | 13.324 | 13.355 | VV | 1376 | 20628 | 0.27% | 0.065% |
| 253 | 13.382 | 13.355 | 13.411 | VV | 1933 | 44746 | 0.59% | 0.141% |
| 254 | 13.434 | 13.411 | 13.460 | VV | 2909 | 49165 | 0.64% | 0.155% |
| 255 | 13.469 | 13.460 | 13.529 | VV | 964 | 32706 | 0.43% | 0.103% |
| 256 | 13.535 | 13.529 | 13.542 | VV | 754 | 5349 | 0.07% | 0.017% |
| 257 | 13.546 | 13.542 | 13.552 | VV | 721 | 4150 | 0.05% | 0.013% |
| 258 | 13.556 | 13.552 | 13.562 | VV | 701 | 3812 | 0.05% | 0.012% |
| 259 | 13.568 | 13.562 | 13.609 | VV | 725 | 16232 | 0.21% | 0.051% |
| 260 | 13.643 | 13.609 | 13.659 | VV | 821 | 21617 | 0.28% | 0.068% |
| 261 | 13.666 | 13.659 | 13.671 | VV | 911 | 5988 | 0.08% | 0.019% |
| 262 | 13.679 | 13.671 | 13.703 | VV | 865 | 15208 | 0.20% | 0.048% |
| 263 | 13.722 | 13.703 | 13.740 | VV | 879 | 17395 | 0.23% | 0.055% |
| 264 | 13.745 | 13.740 | 13.754 | VV | 906 | 6175 | 0.08% | 0.019% |
| 265 | 13.769 | 13.754 | 13.775 | VV | 896 | 10293 | 0.13% | 0.032% |
| 266 | 13.777 | 13.775 | 13.785 | VV | 926 | 4620 | 0.06% | 0.015% |
| 267 | 13.797 | 13.785 | 13.807 | VV | 897 | 10862 | 0.14% | 0.034% |
| 268 | 13.816 | 13.807 | 13.823 | VV | 831 | 7981 | 0.10% | 0.025% |
| 269 | 13.830 | 13.823 | 13.845 | VV | 975 | 10301 | 0.13% | 0.032% |
| 270 | 13.893 | 13.845 | 13.935 | VV | 1643 | 62734 | 0.82% | 0.198% |
| 271 | 13.942 | 13.935 | 13.954 | VV | 1109 | 11319 | 0.15% | 0.036% |
| 272 | 13.958 | 13.954 | 13.982 | VV | 1054 | 17380 | 0.23% | 0.055% |
| 273 | 13.988 | 13.982 | 14.006 | VV | 1256 | 15135 | 0.20% | 0.048% |
| 274 | 14.010 | 14.006 | 14.018 | VV | 856 | 5592 | 0.07% | 0.018% |
| 275 | 14.053 | 14.018 | 14.061 | VV | 1046 | 20951 | 0.27% | 0.066% |
| 276 | 14.082 | 14.061 | 14.089 | VV | 1115 | 16392 | 0.21% | 0.052% |
| 277 | 14.093 | 14.089 | 14.107 | VV | 1052 | 10386 | 0.14% | 0.033% |
| 278 | 14.117 | 14.107 | 14.124 | VV | 1045 | 10050 | 0.13% | 0.032% |
| 279 | 14.127 | 14.124 | 14.141 | VV | 1159 | 10386 | 0.14% | 0.033% |
| 280 | 14.154 | 14.141 | 14.182 | VV | 1134 | 26325 | 0.34% | 0.083% |
| 281 | 14.192 | 14.182 | 14.206 | VV | 1244 | 16313 | 0.21% | 0.051% |
| 282 | 14.212 | 14.206 | 14.219 | VV | 1162 | 8348 | 0.11% | 0.026% |
| 283 | 14.246 | 14.219 | 14.266 | VV | 1327 | 31497 | 0.41% | 0.099% |
| 284 | 14.289 | 14.266 | 14.326 | VV | 1527 | 47105 | 0.62% | 0.148% |
| 285 | 14.335 | 14.326 | 14.363 | VV | 1360 | 24841 | 0.33% | 0.078% |
| 286 | 14.369 | 14.363 | 14.382 | VV | 1084 | 11141 | 0.15% | 0.035% |
| 287 | 14.392 | 14.382 | 14.426 | VV | 1207 | 25699 | 0.34% | 0.081% |
| 288 | 14.433 | 14.426 | 14.442 | VV | 1056 | 9412 | 0.12% | 0.030% |
| 289 | 14.450 | 14.442 | 14.464 | VV | 1084 | 13060 | 0.17% | 0.041% |
| 290 | 14.494 | 14.464 | 14.509 | VV | 1963 | 38883 | 0.51% | 0.123% |
| 291 | 14.534 | 14.509 | 14.580 | VV | 2875 | 68106 | 0.89% | 0.215% |
| 292 | 14.586 | 14.580 | 14.605 | VV | 987 | 13094 | 0.17% | 0.041% |
| 293 | 14.609 | 14.605 | 14.622 | VV | 1085 | 9388 | 0.12% | 0.030% |
| 294 | 14.632 | 14.622 | 14.645 | VV | 869 | 10872 | 0.14% | 0.034% |
| 295 | 14.658 | 14.645 | 14.673 | VV | 905 | 14118 | 0.18% | 0.045% |
| 296 | 14.698 | 14.673 | 14.724 | VV | 1668 | 37887 | 0.50% | 0.119% |
| 297 | 14.734 | 14.724 | 14.740 | VV | 1059 | 9715 | 0.13% | 0.031% |
| 298 | 14.742 | 14.740 | 14.752 | VV | 1050 | 6698 | 0.09% | 0.021% |
| 299 | 14.759 | 14.752 | 14.780 | VV | 1155 | 16204 | 0.21% | 0.051% |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 300 | 14.782 | 14.780 | 14.821 | VV | 955 | 19821 | 0.26% | 0.062% |
| 301 | 14.844 | 14.821 | 14.869 | VV | 998 | 26398 | 0.35% | 0.083% |
| 302 | 14.893 | 14.869 | 14.909 | VV | 1150 | 24635 | 0.32% | 0.078% |
| 303 | 14.911 | 14.909 | 14.934 | VV | 1075 | 14917 | 0.20% | 0.047% |
| 304 | 14.958 | 14.934 | 14.974 | VV | 1166 | 25321 | 0.33% | 0.080% |
| 305 | 15.001 | 14.974 | 15.008 | VV | 1261 | 23313 | 0.31% | 0.073% |
| 306 | 15.022 | 15.008 | 15.026 | VV | 1401 | 14202 | 0.19% | 0.045% |
| 307 | 15.051 | 15.026 | 15.055 | VV | 1336 | 21235 | 0.28% | 0.067% |
| 308 | 15.082 | 15.055 | 15.131 | VV | 2376 | 72208 | 0.95% | 0.228% |
| 309 | 15.146 | 15.131 | 15.157 | VV | 1307 | 19393 | 0.25% | 0.061% |
| 310 | 15.191 | 15.157 | 15.212 | VV | 1503 | 42986 | 0.56% | 0.136% |
| 311 | 15.246 | 15.212 | 15.266 | VV | 1879 | 47593 | 0.62% | 0.150% |
| 312 | 15.273 | 15.266 | 15.278 | VV | 1237 | 8453 | 0.11% | 0.027% |
| 313 | 15.286 | 15.278 | 15.297 | VV | 1270 | 13167 | 0.17% | 0.042% |
| 314 | 15.302 | 15.297 | 15.315 | VV | 1287 | 13327 | 0.17% | 0.042% |
| 315 | 15.330 | 15.315 | 15.335 | VV | 1428 | 15806 | 0.21% | 0.050% |
| 316 | 15.359 | 15.335 | 15.376 | VV | 1623 | 35797 | 0.47% | 0.113% |
| 317 | 15.382 | 15.376 | 15.387 | VV | 1634 | 9575 | 0.13% | 0.030% |
| 318 | 15.393 | 15.387 | 15.408 | VV | 1652 | 19399 | 0.25% | 0.061% |
| 319 | 15.426 | 15.408 | 15.454 | VV | 1513 | 37585 | 0.49% | 0.118% |
| 320 | 15.467 | 15.454 | 15.476 | VV | 1369 | 16937 | 0.22% | 0.053% |
| 321 | 15.482 | 15.476 | 15.491 | VV | 1379 | 10681 | 0.14% | 0.034% |
| 322 | 15.516 | 15.491 | 15.529 | VV | 1904 | 34719 | 0.45% | 0.109% |
| 323 | 15.551 | 15.529 | 15.576 | VV | 2498 | 53497 | 0.70% | 0.169% |
| 324 | 15.584 | 15.576 | 15.664 | VV | 1709 | 67842 | 0.89% | 0.214% |
| 325 | 15.680 | 15.664 | 15.693 | VV | 1318 | 20313 | 0.27% | 0.064% |
| 326 | 15.702 | 15.693 | 15.709 | VV | 1154 | 11238 | 0.15% | 0.035% |
| 327 | 15.714 | 15.709 | 15.725 | VV | 1234 | 10807 | 0.14% | 0.034% |
| 328 | 15.729 | 15.725 | 15.735 | VV | 1229 | 6989 | 0.09% | 0.022% |
| 329 | 15.740 | 15.735 | 15.747 | VV | 1246 | 8209 | 0.11% | 0.026% |
| 330 | 15.752 | 15.747 | 15.756 | VV | 1354 | 7085 | 0.09% | 0.022% |
| 331 | 15.762 | 15.756 | 15.781 | VV | 1335 | 17962 | 0.24% | 0.057% |
| 332 | 15.798 | 15.781 | 15.811 | VV | 1370 | 22208 | 0.29% | 0.070% |
| 333 | 15.820 | 15.811 | 15.842 | VV | 1250 | 20811 | 0.27% | 0.066% |
| 334 | 15.848 | 15.842 | 15.851 | VV | 1212 | 6622 | 0.09% | 0.021% |
| 335 | 15.867 | 15.851 | 15.877 | VV | 1317 | 18505 | 0.24% | 0.058% |
| 336 | 15.880 | 15.877 | 15.887 | VV | 1318 | 7375 | 0.10% | 0.023% |
| 337 | 15.910 | 15.887 | 15.926 | VV | 1396 | 29439 | 0.39% | 0.093% |
| 338 | 15.931 | 15.926 | 15.942 | VV | 1422 | 12867 | 0.17% | 0.041% |
| 339 | 15.995 | 15.942 | 16.012 | VV | 1364 | 52786 | 0.69% | 0.166% |
| 340 | 16.035 | 16.012 | 16.077 | VV | 1760 | 57286 | 0.75% | 0.181% |
| 341 | 16.084 | 16.077 | 16.105 | VV | 1348 | 22688 | 0.30% | 0.072% |
| 342 | 16.129 | 16.105 | 16.191 | VV | 3088 | 106231 | 1.39% | 0.335% |
| 343 | 16.199 | 16.191 | 16.214 | VV | 1770 | 22351 | 0.29% | 0.070% |
| 344 | 16.220 | 16.214 | 16.247 | VV | 1722 | 32714 | 0.43% | 0.103% |
| 345 | 16.256 | 16.247 | 16.277 | VV | 1643 | 27127 | 0.36% | 0.086% |
| 346 | 16.286 | 16.277 | 16.295 | VV | 1641 | 15725 | 0.21% | 0.050% |
| 347 | 16.331 | 16.295 | 16.356 | VV | 1681 | 56750 | 0.74% | 0.179% |
| 348 | 16.391 | 16.356 | 16.440 | VV | 1894 | 82789 | 1.08% | 0.261% |
| 349 | 16.495 | 16.440 | 16.523 | VV | 2935 | 102261 | 1.34% | 0.322% |
| 350 | 16.551 | 16.523 | 16.584 | VV | 2744 | 59115 | 0.77% | 0.186% |
| 351 | 16.600 | 16.584 | 16.631 | VV | 1698 | 43383 | 0.57% | 0.137% |

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| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 352 | 16.640 | 16.631 | 16.665 | VV | 1562 | 30763 | 0.40% | 0.097% |
| 353 | 16.672 | 16.665 | 16.722 | VV | 1593 | 50382 | 0.66% | 0.159% |
| 354 | 16.729 | 16.722 | 16.753 | VV | 1488 | 25985 | 0.34% | 0.082% |
| 355 | 16.834 | 16.753 | 16.863 | VV | 1759 | 103936 | 1.36% | 0.328% |
| 356 | 16.872 | 16.863 | 16.881 | VV | 1725 | 17394 | 0.23% | 0.055% |
| 357 | 16.903 | 16.881 | 16.914 | VV | 1794 | 32896 | 0.43% | 0.104% |
| 358 | 16.946 | 16.914 | 16.982 | VV | 2620 | 82427 | 1.08% | 0.260% |
| 359 | 16.997 | 16.982 | 17.030 | VV | 1832 | 48808 | 0.64% | 0.154% |
| 360 | 17.052 | 17.030 | 17.080 | VV | 1963 | 54191 | 0.71% | 0.171% |
| 361 | 17.116 | 17.080 | 17.133 | VV | 1890 | 57394 | 0.75% | 0.181% |
| 362 | 17.142 | 17.133 | 17.155 | VV | 1754 | 23303 | 0.31% | 0.073% |
| 363 | 17.176 | 17.155 | 17.198 | VV | 1999 | 47553 | 0.62% | 0.150% |
| 364 | 17.238 | 17.198 | 17.260 | VV | 2087 | 72754 | 0.95% | 0.229% |
| 365 | 17.275 | 17.260 | 17.329 | VV | 2188 | 83195 | 1.09% | 0.262% |
| 366 | 17.379 | 17.329 | 17.452 | VV | 3651 | 175406 | 2.30% | 0.553% |
| 367 | 17.457 | 17.452 | 17.468 | VV | 2019 | 18463 | 0.24% | 0.058% |
| 368 | 17.475 | 17.468 | 17.489 | VV | 1998 | 23789 | 0.31% | 0.075% |
| 369 | 17.519 | 17.489 | 17.542 | VV | 2061 | 62869 | 0.82% | 0.198% |
| 370 | 17.546 | 17.542 | 17.562 | VV | 2066 | 23253 | 0.30% | 0.073% |
| 371 | 17.570 | 17.562 | 17.593 | VV | 2081 | 37032 | 0.49% | 0.117% |
| 372 | 17.607 | 17.593 | 17.631 | VV | 1983 | 43053 | 0.56% | 0.136% |
| 373 | 17.663 | 17.631 | 17.692 | VV | 2136 | 71786 | 0.94% | 0.226% |
| 374 | 17.703 | 17.692 | 17.740 | VV | 2021 | 56180 | 0.74% | 0.177% |
| 375 | 17.803 | 17.740 | 17.860 | VV | 3169 | 160309 | 2.10% | 0.505% |
| 376 | 17.890 | 17.860 | 17.907 | VV | 2167 | 58046 | 0.76% | 0.183% |
| 377 | 17.951 | 17.907 | 17.984 | VV | 2301 | 99555 | 1.30% | 0.314% |
| 378 | 18.000 | 17.984 | 18.008 | VV | 2250 | 31139 | 0.41% | 0.098% |
| 379 | 18.065 | 18.008 | 18.117 | VV | 2376 | 148905 | 1.95% | 0.469% |
| 380 | 18.140 | 18.117 | 18.152 | VV | 2392 | 48197 | 0.63% | 0.152% |
| 381 | 18.209 | 18.152 | 18.280 | VV | 4310 | 222378 | 2.91% | 0.701% |
| 382 | 18.288 | 18.280 | 18.300 | VBA | 2557 | 28907 | 0.38% | 0.091% |

Sum of corrected areas: 31720429

Aromatic EPH 021125.M Fri Feb 28 02:09:42 2025

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

# Report of Analysis

| | | | | | |
|---|---|---|---|---|---|
| Client: | Weston Solutions, Inc. | | Date Collected: | | |
| Project: | RFP 905 | | Date Received: | | |
| Client Sample ID: | PB166883TB | | SDG No.: | Q1421 | |
| Lab Sample ID: | PB166883TB | | Matrix: | water | |
| Analytical Method: | NJEPH | | % Solid: | 0 | |
| Sample Wt/Vol: | 1000 Units: | mL | Final Vol: | 2000 | uL |
| Soil Aliquot Vol: | | uL | Test: | EPH | |
| Prep Method : | SW3510 | | | | |

| File ID : | Dilution: | Prep Date : | Date Analyzed : | Prep Batch ID |
|---|---|---|---|---|
| FC068308.D | 1 | | 02/27/25 | FC022725AL |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| Aliphatic C9-C12 | Aliphatic C9-C12 | 5.76 | U | 5.76 | 30.0 | ug/l |
| Aliphatic C12-C16 | Aliphatic C12-C16 | 3.61 | U | 3.61 | 20.0 | ug/l |
| Aliphatic C16-C21 | Aliphatic C16-C21 | 5.14 | U | 5.14 | 30.0 | ug/l |
| Aliphatic C21-C28 | Aliphatic C21-C28 | 8.97 | U | 8.97 | 40.0 | ug/l |
| Aliphatic C28-C40 | Aliphatic C28-C40 | 17.0 | U | 17.0 | 60.0 | ug/l |
| **SURROGATES** | | | | | | |
| 3383-33-2 | 1-chlorooctadecane (SURR) | 32.4 | | 40 - 140 | 65% | SPK: 50 |
| 84-15-1 | ortho-Terphenyl (SURR) | 0.00 | | 40 - 140 | 0% | SPK: 50 |

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

# Quantitation Report For Aliphatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | PB166883TB | Acq On: | 27 Feb 2025 11:38 |
| Client Sample ID: | PB166883TB | Operator: | YP/AJ |
| Data file: | FC068308.D | Misc: | |
| Instrument: | FID_C | ALS Vial: | 13 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aliphatic C9-C12 | 3.104 | 6.370 | 0 | 0 | 300 | ug/ml |
| Aliphatic C12-C16 | 6.371 | 9.754 | 0 | 0 | 200 | ug/ml |
| Aliphatic C16-C21 | 9.755 | 13.108 | 0 | 0 | 300 | ug/ml |
| Aliphatic C21-C28 | 13.109 | 16.762 | 0 | 0 | 400 | ug/ml |
| Aliphatic C28-C40 | 16.763 | 21.566 | 0 | 0 | 600 | ug/ml |
| Aliphatic EPH | 3.104 | 21.566 | 0 | 0 | | ug/ml |
| ortho-Terphenyl (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |
| 1-chlorooctadecane (SURR) | 12.841 | 12.841 | 3638278 | 32.35 | | ug/ml |
| Aliphatic C9-C28 | 3.104 | 16.762 | 0 | 0 | 1200 | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022725AL\
Data File : FC068308.D
Signal(s) : FID1A.ch
Acq On : 27 Feb 2025 11:38
Operator : YP/AJ
Sample : PB166883TB
Misc :
ALS Vial : 13 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
PB166883TB

Integration File: autoint1.e
Quant Time: Mar 05 04:43:36 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

| Compound | R.T. | Response | Conc Units |
|---|---|---|---|
| System Monitoring Compounds | | | |
| 12) S 1-chlorooctadecane (S... | 12.841 | 3638278 | 32.348 ug/ml |
| Spiked Amount 50.000 | | Recovery = 64.70% | |
| Target Compounds | | | |

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

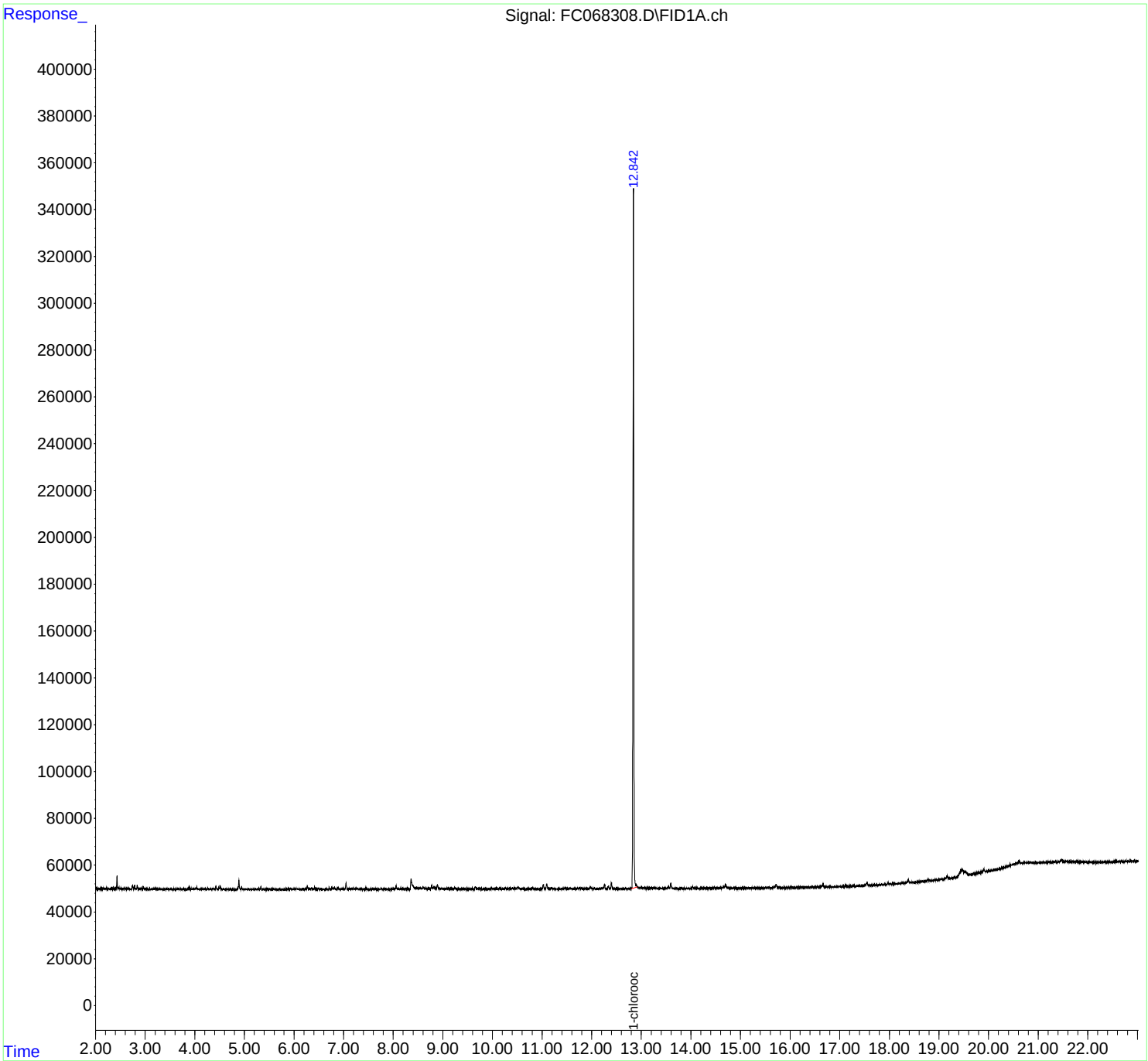
Quantitation Report (QT Reviewed)

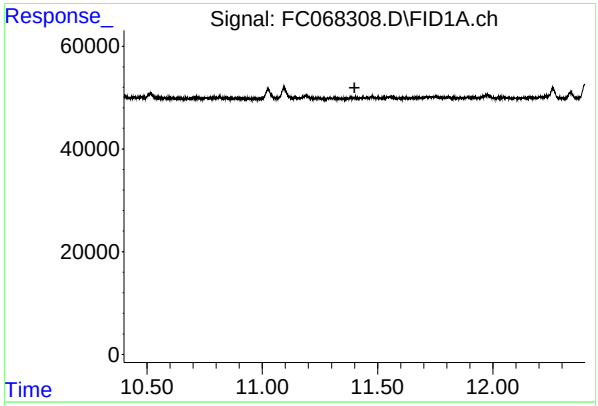
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022725AL\
Data File : FC068308.D
Signal(s) : FID1A.ch
Acq On : 27 Feb 2025 11:38
Operator : YP/AJ
Sample : PB166883TB
Misc :
ALS Vial : 13 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
PB166883TB

Integration File: autoint1.e
Quant Time: Mar 05 04:43:36 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

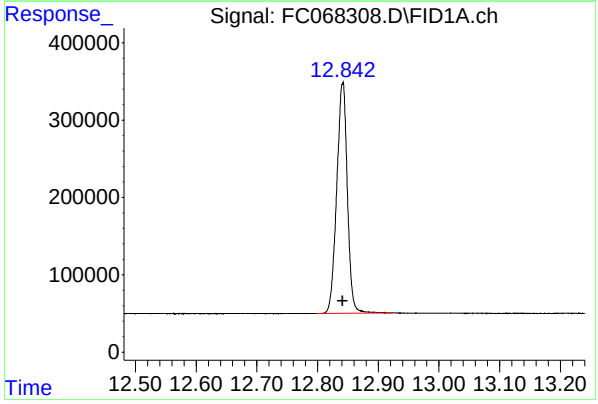





#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.400 min
Response: 0
Conc: N.D.

**Instrument :**
FID_C
**ClientSampleId :**
PB166883TB




#12 1-chlorooctadecane (SURR)

R.T.: 12.841 min
Delta R.T.: 0.000 min
Response: 3638278
Conc: 32.35 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022725AL\
Data File : FC068308.D
Signal(s) : FID1A.ch
Acq On : 27 Feb 2025 11:38
Sample : PB166883TB
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Title : GC Extractables

Signal : FID1A.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 12.841 | 12.798 | 12.924 | BB | 298414 | 3638278 | 100.00% | 100.000% |
| | | | Sum of corrected areas: | | | 3638278 | | |

Aliphatic EPH 021125.M Fri Feb 28 01:08:54 2025

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

# Report of Analysis

| | | | | | |
|---|---|---|---|---|---|
| Client: | Weston Solutions, Inc. | | Date Collected: | | |
| Project: | RFP 905 | | Date Received: | | |
| Client Sample ID: | PB166883TB | | SDG No.: | Q1421 | |
| Lab Sample ID: | PB166883TB | | Matrix: | water | |
| Analytical Method: | NJEPH | | % Solid: | 0 | |
| Sample Wt/Vol: | 1000 | Units: mL | Final Vol: | 2000 | uL |
| Soil Aliquot Vol: | | uL | Test: | EPH | |
| Prep Method : | SW3510 | | | | |

| File ID : | Dilution: | Prep Date : | Date Analyzed : | Prep Batch ID |
|---|---|---|---|---|
| FD049117.D | 1 | | 02/27/25 | FD022725AR |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| Aromatic C10-C12 | Aromatic C10-C12 | 3.32 | U | 3.32 | 20.0 | ug/l |
| Aromatic C12-C16 | Aromatic C12-C16 | 3.69 | U | 3.69 | 30.0 | ug/l |
| Aromatic C16-C21 | Aromatic C16-C21 | 12.7 | U | 12.7 | 50.0 | ug/l |
| Aromatic C21-C36 | Aromatic C21-C36 | 25.2 | U | 25.2 | 80.0 | ug/l |
| **SURROGATES** | | | | | | |
| 580-13-2 | 2-Bromonaphthalene (SURR) | 63.4 | | 40 - 140 | 127% | SPK: 50 |
| 321-60-8 | 2-Flurobiphenyl (SURR) | 63.2 | | 40 - 140 | 126% | SPK: 50 |
| 84-15-1 | ortho-Terphenyl (SURR) | 56.0 | | 40 - 140 | 112% | SPK: 50 |

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

# Quantitation Report For Aromatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | PB166883TB | Acq On: | 27 Feb 2025 11:38 |
| Client Sample ID: | PB166883TB | Operator: | YP/AJ |
| Data file: | FD049117.D | Misc: | |
| Instrument: | FID_D | ALS Vial: | 63 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aromatic C10-C12 | 4.076 | 5.794 | 0 | 0 | 200 | ug/ml |
| Aromatic C12-C16 | 5.795 | 8.397 | 0 | 0 | 300 | ug/ml |
| Aromatic C16-C21 | 8.398 | 12.661 | 0 | 0 | 500 | ug/ml |
| Aromatic C21-C36 | 12.662 | 18.071 | 0 | 0 | 800 | ug/ml |
| Aromatic EPH | 4.076 | 18.071 | 0 | 0 | | ug/ml |
| 2-Bromonaphthalene (SURR) | 7.353 | 7.353 | 9069576 | 63.38 | | ug/ml |
| 2-Flurobiphenyl (SURR) | 8.202 | 8.202 | 5555151 | 63.19 | | ug/ml |
| ortho-Terphenyl (SURR) | 11.237 | 11.237 | 9067534 | 56.05 | | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022725AR\
Data File : FD049117.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2025 11:38
Operator : YP/AJ
Sample : PB166883TB
Misc :
ALS Vial : 63 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
PB166883TB

Integration File: autoint1.e
Quant Time: Feb 28 01:26:09 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

| Compound | R.T. | Response | Conc Units |
|---|---|---|---|
| System Monitoring Compounds | | | |
| 4) S 2-Bromonaphthalene (S... | 7.353 | 9069576 | 63.375 ug/ml |
| Spiked Amount 50.000 | | Recovery = 126.75% | |
| 6) S 2-Flurobiphenyl (SURR) | 8.202 | 5555151 | 63.190 ug/ml |
| Spiked Amount 50.000 Range 0 - 131 | | Recovery = 126.38% | |
| 11) S ortho-Terphenyl (SURR) | 11.237 | 9067534 | 56.051 ug/ml |
| Spiked Amount 50.000 | | Recovery = 112.10% | |
| Target Compounds | | | |

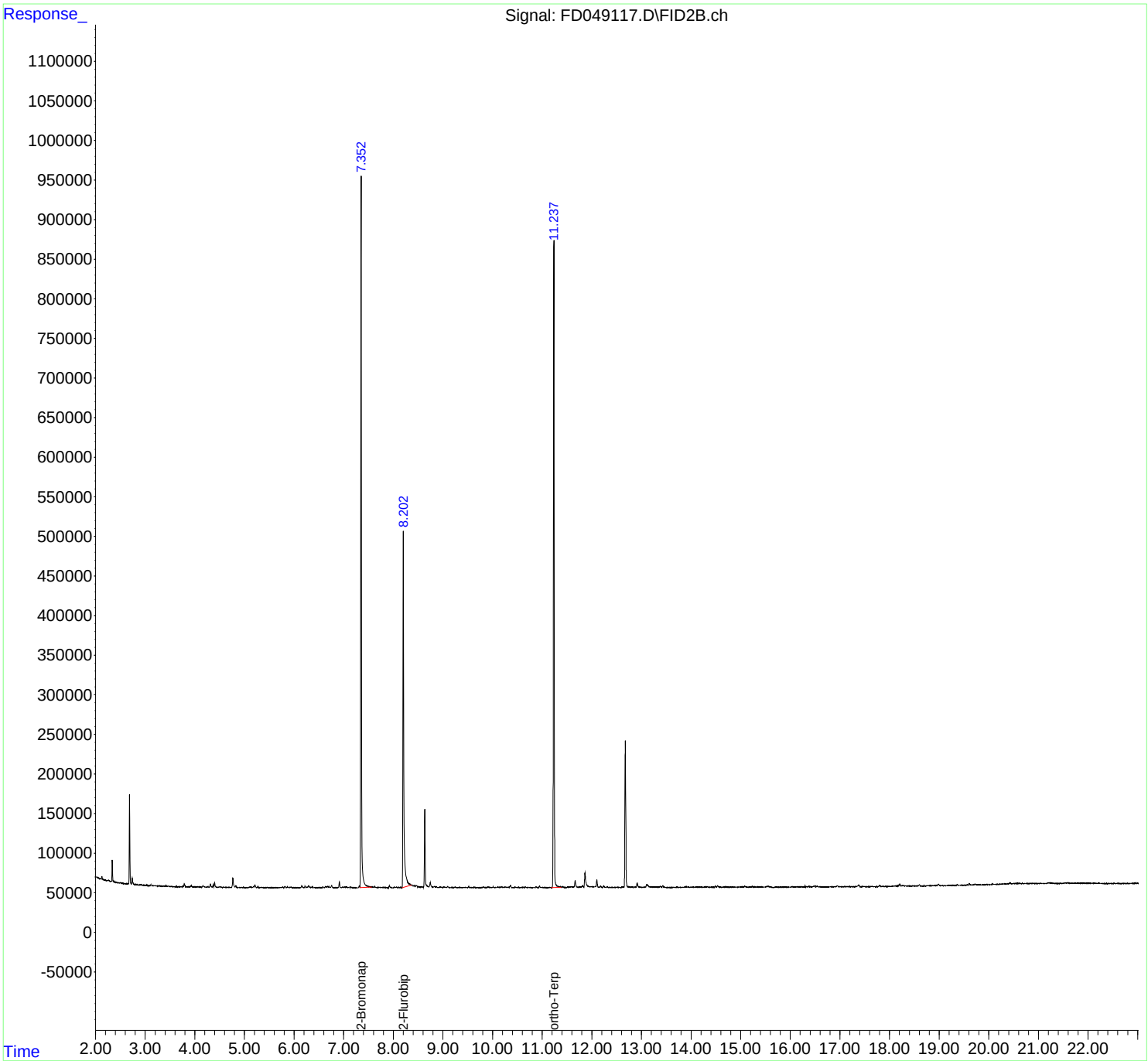
(f)=RT Delta > 1/2 Window (m)=manual int.

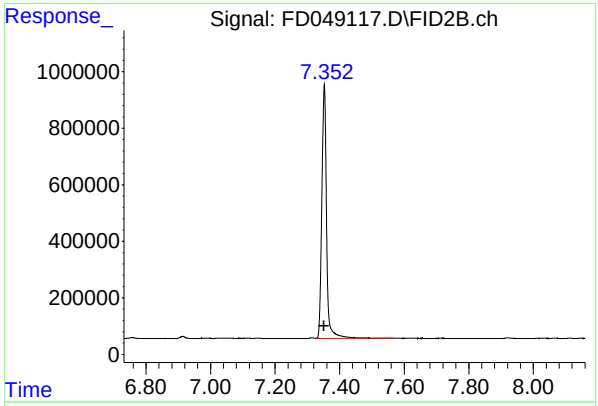
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022725AR\
Data File : FD049117.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2025 11:38
Operator : YP/AJ
Sample : PB166883TB
Misc :
ALS Vial : 63 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
PB166883TB

Integration File: autoint1.e
Quant Time: Feb 28 01:26:09 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

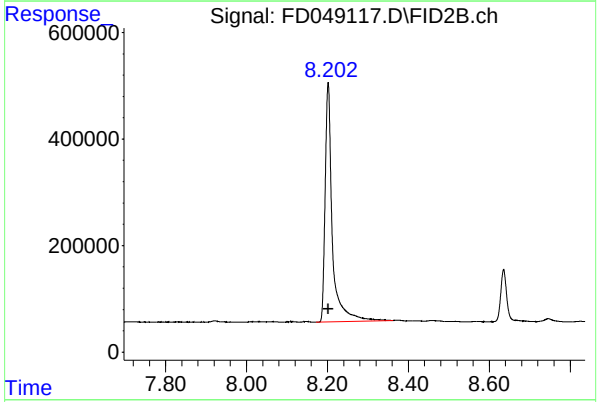





#4 2-Bromonaphthalene (SURR)

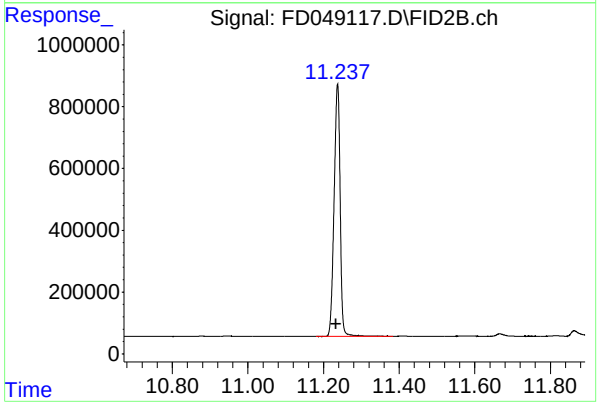
R.T.: 7.353 min
Delta R.T.: 0.001 min
Response: 9069576
Conc: 63.38 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
PB166883TB




#6 2-Flurobiphenyl (SURR)

R.T.: 8.202 min
Delta R.T.: 0.000 min
Response: 5555151
Conc: 63.19 ug/ml




#11 ortho-Terphenyl (SURR)

R.T.: 11.237 min
Delta R.T.: 0.004 min
Response: 9067534
Conc: 56.05 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022725AR\
Data File : FD049117.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2025 11:38
Sample : PB166883TB
Misc :
ALS Vial : 63 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Title : GC Extractables

Signal : FID2B.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 7.353 | 7.327 | 7.565 | VB | 896174 | 9069576 | 100.00% | 38.281% |
| 2 | 8.202 | 8.172 | 8.362 | BV | 449985 | 5555151 | 61.25% | 23.447% |
| 3 | 11.237 | 11.180 | 11.383 | BB | 817167 | 9067534 | 99.98% | 38.272% |
| | | | Sum of corrected areas: | | | 23692261 | | |

Aromatic EPH 021125.M Fri Feb 28 01:59:03 2025

# CALIBRATION SUMMARY

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

# Inital Calibration Report for SequenceID : FC021125AL

**AreaCount**

| Parameter Range | FC068252.D | FC068253.D | FC068254.D | FC068255.D | FC068256.D | |
|---|---|---|---|---|---|---|
| Aliphatic C9-C12 | 39331006.000 | 20240186.000 | 8511519.000 | 4474674.000 | 2221877.000 | |
| Aliphatic C12-C16 | 25563872.000 | 13091029.000 | 5472087.000 | 2866719.000 | 1444048.000 | |
| Aliphatic C16-C21 | 36707935.000 | 18751121.000 | 7907675.000 | 4144581.000 | 2112599.000 | |
| Aliphatic C21-C28 | 45593595.000 | 23234194.000 | 9834944.000 | 5144532.000 | 2635031.000 | |
| Aliphatic C28-C40 | 56736862.000 | 29009865.000 | 12324513.000 | 6514067.000 | 3350978.000 | |
| Aliphatic EPH | 203933270.000 | 104326395.000 | 44050738.000 | 23144573.000 | 11764533.000 | |

**AVG Response Factor**

| Parameter Range | AVG RF | % RSD | | | | |
|---|---|---|---|---|---|---|
| Aliphatic C9-C12 | 141035.5019998 | 5.636 | | | | |
| Aliphatic C12-C16 | 136654.515 | 5.375 | | | | |
| Aliphatic C16-C21 | 131630.8946664 | 6.092 | | | | |
| Aliphatic C21-C28 | 122691.3215 | 6.255 | | | | |
| Aliphatic C28-C40 | 102846.462333 | 7.171 | | | | |
| Aliphatic EPH | 122175.1266664 | 6.234 | | | | |

**Concentration**

| Parameter Range | FC068252.D | FC068253.D | FC068254.D | FC068255.D | FC068256.D | |
|---|---|---|---|---|---|---|
| Aliphatic C9-C12 | 300.000 | 150.000 | 60.000 | 30.000 | 15.000 | |
| Aliphatic C12-C16 | 200.000 | 100.000 | 40.000 | 20.000 | 10.000 | |
| Aliphatic C16-C21 | 300.000 | 150.000 | 60.000 | 30.000 | 15.000 | |
| Aliphatic C21-C28 | 400.000 | 200.000 | 80.000 | 40.000 | 20.000 | |
| Aliphatic C28-C40 | 600.000 | 300.000 | 120.000 | 60.000 | 30.000 | |
| Aliphatic EPH | 1800.000 | 900.000 | 360.000 | 180.000 | 90.000 | |

**Response Factor**

| Parameter Range | FC068252.D | FC068253.D | FC068254.D | FC068255.D | FC068256.D | |
|---|---|---|---|---|---|---|
| Aliphatic C9-C12 | 131103.353333 | 134934.573333 | 141858.650000 | 149155.800000 | 148125.133333 | |
| Aliphatic C12-C16 | 127819.360000 | 130910.290000 | 136802.175000 | 143335.950000 | 144404.800000 | |
| Aliphatic C16-C21 | 122359.783333 | 125007.473333 | 131794.583333 | 138152.700000 | 140839.933333 | |

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

Inital Calibration Report for SequenceID : FC021125AL

| | | | | | | |
|---|---|---|---|---|---|---|
| Aliphatic C21-C28 | 113983.987500 | 116170.970000 | 122936.800000 | 128613.300000 | 131751.550000 | |
| Aliphatic C28-C40 | 94561.436666 | 96699.550000 | 102704.275000 | 108567.783333 | 111699.266666 | |
| Aliphatic EPH | 113296.261111 | 115918.216666 | 122363.161111 | 128580.961111 | 130717.033333 | |

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

| | | | |
|---|---|---|---|
| Lab Sample ID: | 100 PPM ALIPHATIC HC | Acq On: | 10 Feb 2025 16:24 |
| Client Sample ID: | | Operator: | YP/AJ |
| Data file: | FC068252.D | Misc: | |
| Instrument: | FID_C | ALS Vial: | 15 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | Units |
|---|---|---|---|---|---|
| Aliphatic C9-C12 | 3.107 | 6.373 | 39331006.000 | 300.000 | ug/ml |
| Aliphatic C12-C16 | 6.374 | 9.756 | 25563872.000 | 200.000 | ug/ml |
| Aliphatic C16-C21 | 9.757 | 13.110 | 36707935.000 | 300.000 | ug/ml |
| Aliphatic C21-C28 | 13.111 | 16.762 | 45593595.000 | 400.000 | ug/ml |
| Aliphatic C28-C40 | 16.763 | 21.563 | 56736862.000 | 600.000 | ug/ml |
| Aliphatic EPH | 3.107 | | 203933270.000 | 1800.000 | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC021125AL\
Data File : FC068252.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2025 16:24
Operator : YP/AJ
Sample : 100 PPM ALIPHATIC HC STD1
Misc :
ALS Vial : 15 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
100 PPM ALIPHATIC HC STD1

Integration File: autoint1.e
Quant Time: Feb 11 02:30:02 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Tue Feb 11 02:29:33 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

| | Compound | R.T. | Response | Conc Units |
|---|---|---|---|---|
| | **System Monitoring Compounds** | | | |
| 9) | S ortho-Terphenyl (SURR) | 11.410 | 14212174 | 92.574 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 185.15% |
| 12) | S 1-chlorooctadecane (S... | 12.849 | 10559687 | 93.495 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 186.99% |
| | **Target Compounds** | | | |
| 1) | T n-Nonane (C9) | 3.211 | 13034849 | 92.005 ug/ml |
| 2) | T n-Decane (C10) | 4.270 | 13187244 | 92.433 ug/ml |
| 3) | T A~Naphthalene (C11.7) | 5.838 | 14533716 | 93.918 ug/ml |
| 4) | T n-Dodecane (C12) | 6.280 | 13108913 | 92.818 ug/ml |
| 5) | T A~2-methylnaphthalene... | 6.891 | 13929436 | 94.987 ug/ml |
| 6) | T n-Tetradecane (C14) | 8.068 | 12728359 | 93.377 ug/ml |
| 7) | T n-Hexadecane (C16) | 9.664 | 12835513 | 93.490 ug/ml |
| 8) | T n-Octadecane (C18) | 11.104 | 12748213 | 93.034 ug/ml |
| 10) | T n-Eicosane (C20) | 12.408 | 12107311 | 92.743 ug/ml |
| 11) | T n-Heneicosane (C21) | 13.019 | 11852411 | 92.734 ug/ml |
| 13) | T n-Docosane (C22) | 13.604 | 11728617 | 92.902 ug/ml |
| 14) | T n-Tetracosane (C24) | 14.704 | 11568914 | 92.905 ug/ml |
| 15) | T n-Hexacosane (C26) | 15.723 | 11302843 | 92.721 ug/ml |
| 16) | T n-Octacosane (C28) | 16.671 | 10993221 | 92.322 ug/ml |
| 17) | T n-Tricontane (C30) | 17.556 | 11027160 | 91.890 ug/ml |
| 18) | T n-Dotriacontane (C32) | 18.388 | 10599289 | 91.711 ug/ml |
| 19) | T n-Tetratriacontane (C34) | 19.170 | 9898762 | 91.900 ug/ml |
| 20) | T n-Hexatriacontane (C36) | 19.908 | 8865949 | 92.289 ug/ml |
| 21) | T n-Octatriacontane (C38) | 20.619 | 8293679 | 91.939 ug/ml |
| 22) | T n-Tetracontane (C40) | 21.474 | 8052023 | 92.913 ug/ml |

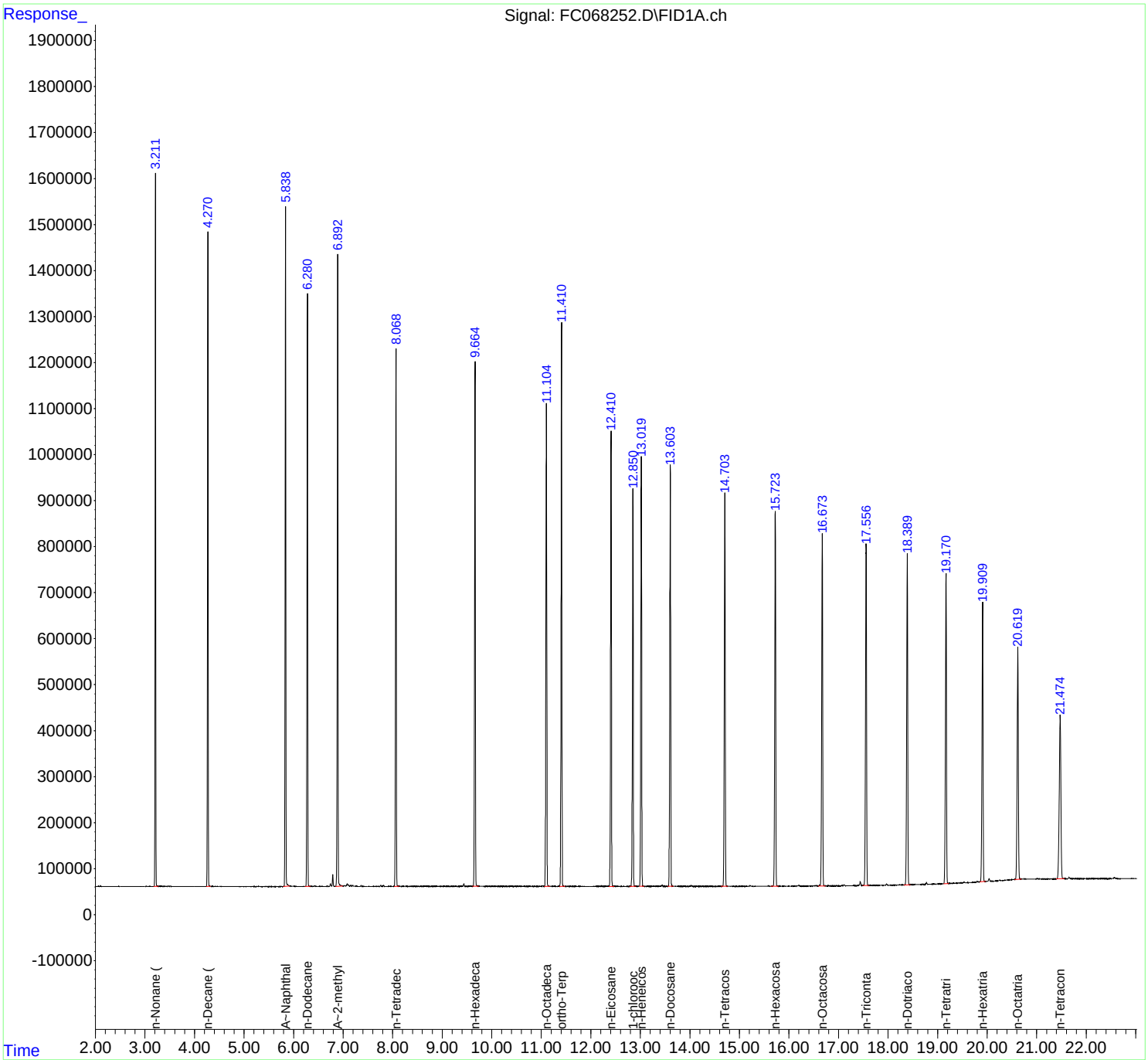
(f)=RT Delta > 1/2 Window (m)=manual int.

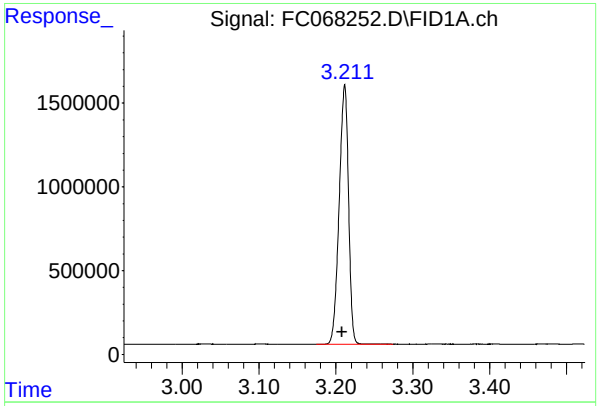
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC021125AL\
Data File : FC068252.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2025 16:24
Operator : YP/AJ
Sample : 100 PPM ALIPHATIC HC STD1
Misc :
ALS Vial : 15 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
100 PPM ALIPHATIC HC STD1

Integration File: autoint1.e
Quant Time: Feb 11 02:30:02 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Tue Feb 11 02:29:33 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

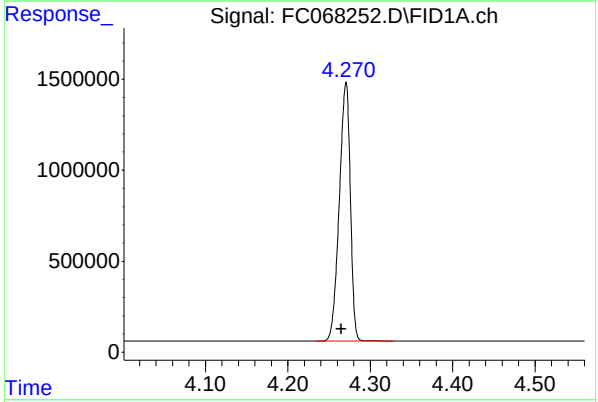





#1 n-Nonane (C9)

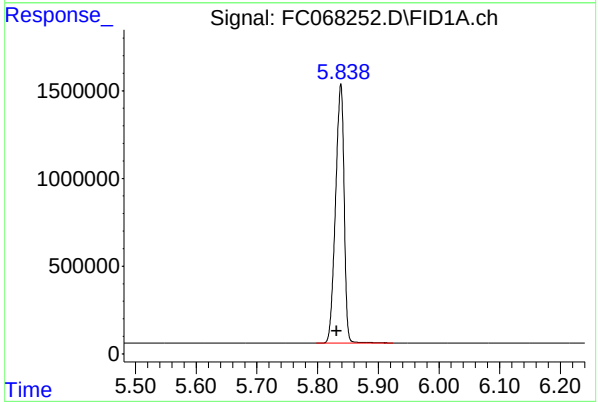
R.T.: 3.211 min
Delta R.T.: 0.003 min
Response: 13034849
Conc: 92.01 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
100 PPM ALIPHATIC HC STD1



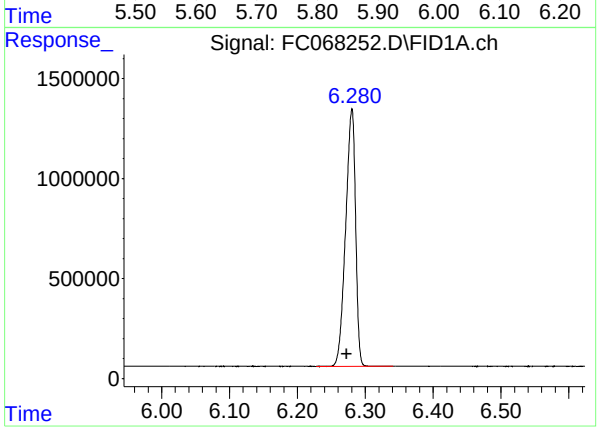

#2 n-Decane (C10)

R.T.: 4.270 min
Delta R.T.: 0.005 min
Response: 13187244
Conc: 92.43 ug/ml



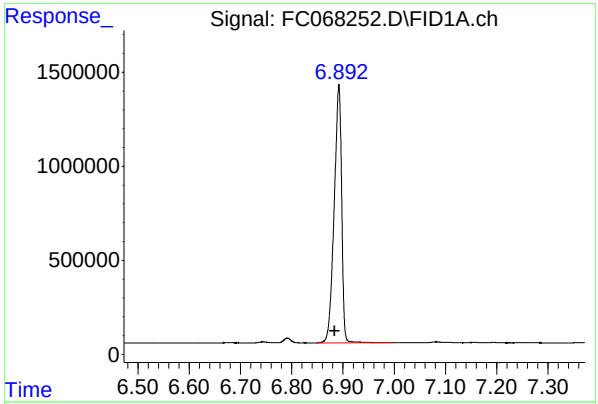

#3 A~Naphthalene (C11.7)

R.T.: 5.838 min
Delta R.T.: 0.006 min
Response: 14533716
Conc: 93.92 ug/ml




#4 n-Dodecane (C12)

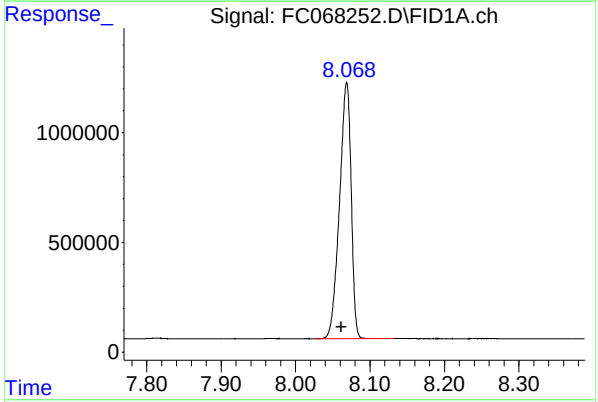
R.T.: 6.280 min
Delta R.T.: 0.007 min
Response: 13108913
Conc: 92.82 ug/ml




#5 A~2-methylnaphthalene (C12.89)

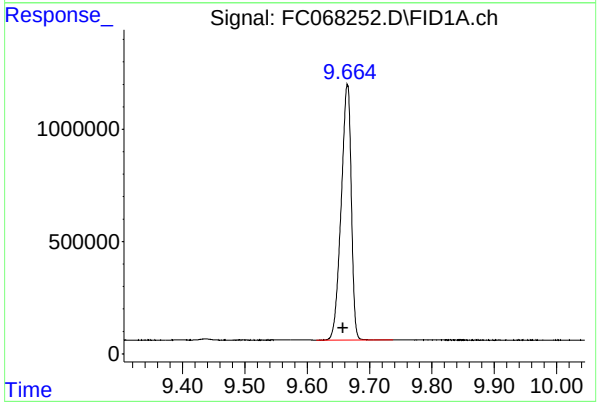
R.T.: 6.891 min
Delta R.T.: 0.007 min
Response: 13929436
Conc: 94.99 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
100 PPM ALIPHATIC HC STD1



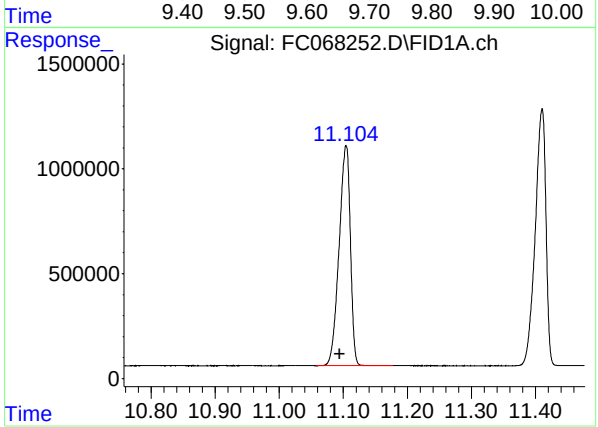

#6 n-Tetradecane (C14)

R.T.: 8.068 min
Delta R.T.: 0.007 min
Response: 12728359
Conc: 93.38 ug/ml



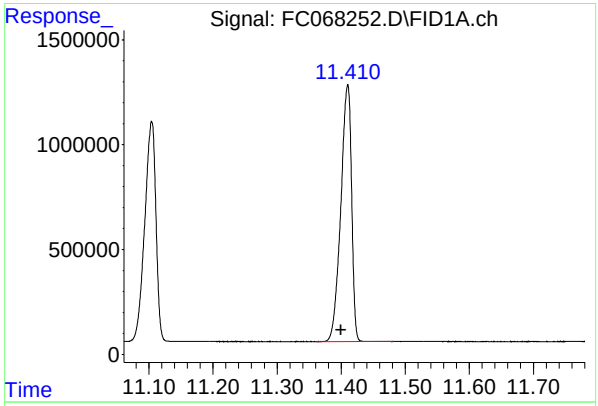

#7 n-Hexadecane (C16)

R.T.: 9.664 min
Delta R.T.: 0.007 min
Response: 12835513
Conc: 93.49 ug/ml




#8 n-Octadecane (C18)

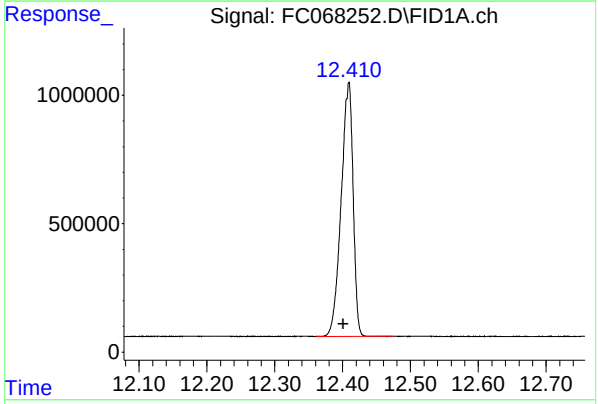
R.T.: 11.104 min
Delta R.T.: 0.009 min
Response: 12748213
Conc: 93.03 ug/ml




#9 ortho-Terphenyl (SURR)

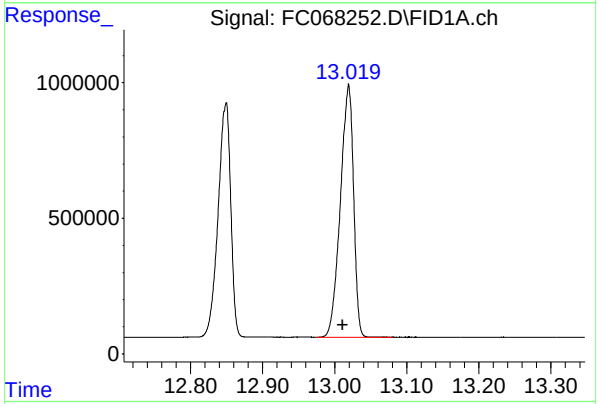
R.T.: 11.410 min
Delta R.T.: 0.010 min
Response: 14212174
Conc: 92.57 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
100 PPM ALIPHATIC HC STD1



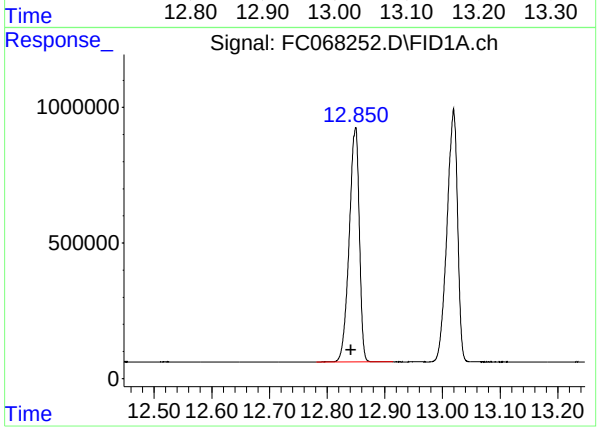

#10 n-Eicosane (C20)

R.T.: 12.408 min
Delta R.T.: 0.007 min
Response: 12107311
Conc: 92.74 ug/ml



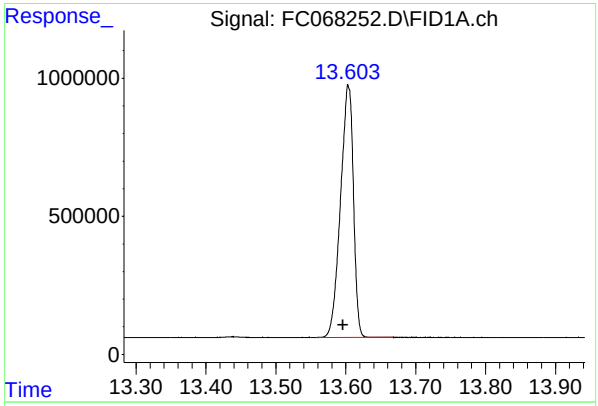

#11 n-Heneicosane (C21)

R.T.: 13.019 min
Delta R.T.: 0.008 min
Response: 11852411
Conc: 92.73 ug/ml




#12 1-chlorooctadecane (SURR)

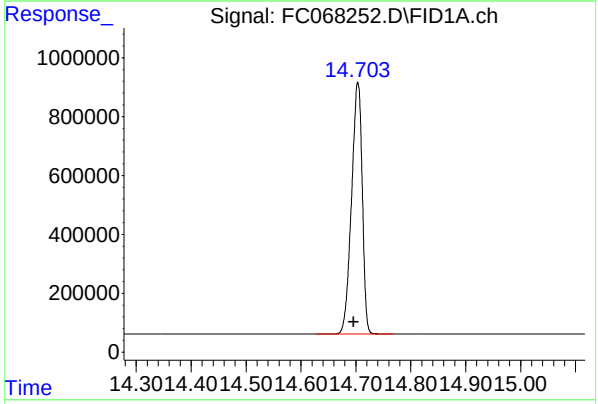
R.T.: 12.849 min
Delta R.T.: 0.007 min
Response: 10559687
Conc: 93.50 ug/ml




#13 n-Docosane (C22)

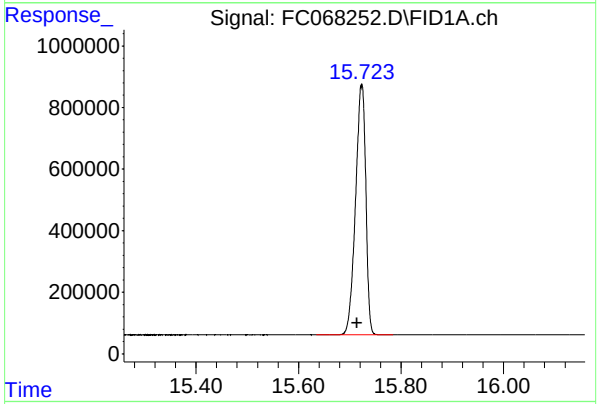
R.T.: 13.604 min
Delta R.T.: 0.008 min
Response: 11728617
Conc: 92.90 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
100 PPM ALIPHATIC HC STD1



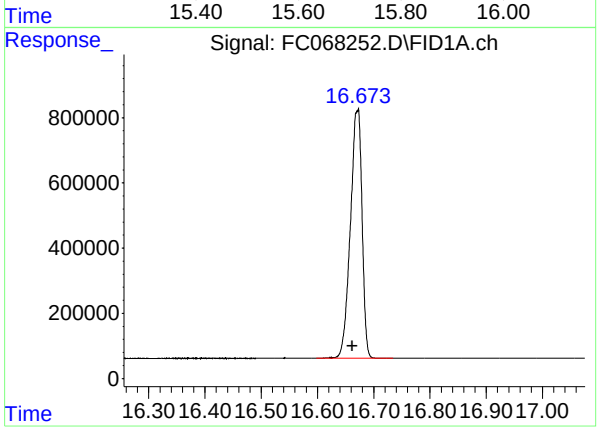

#14 n-Tetracosane (C24)

R.T.: 14.704 min
Delta R.T.: 0.008 min
Response: 11568914
Conc: 92.91 ug/ml



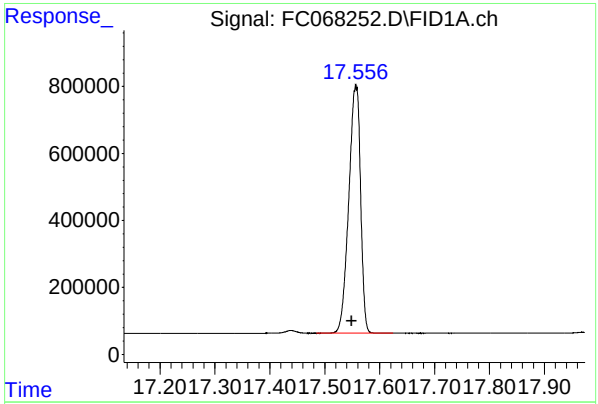

#15 n-Hexacosane (C26)

R.T.: 15.723 min
Delta R.T.: 0.009 min
Response: 11302843
Conc: 92.72 ug/ml




#16 n-Octacosane (C28)

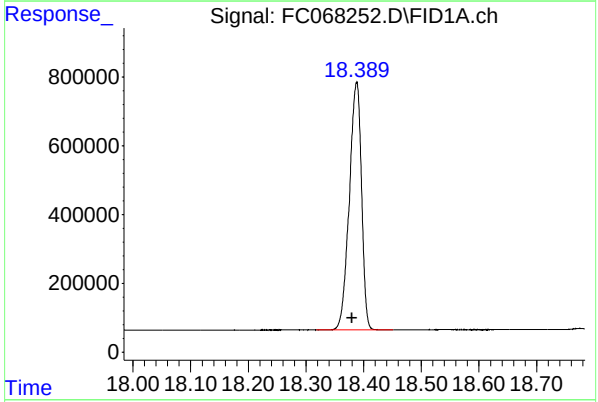
R.T.: 16.671 min
Delta R.T.: 0.009 min
Response: 10993221
Conc: 92.32 ug/ml




#17 n-Tricontane (C30)

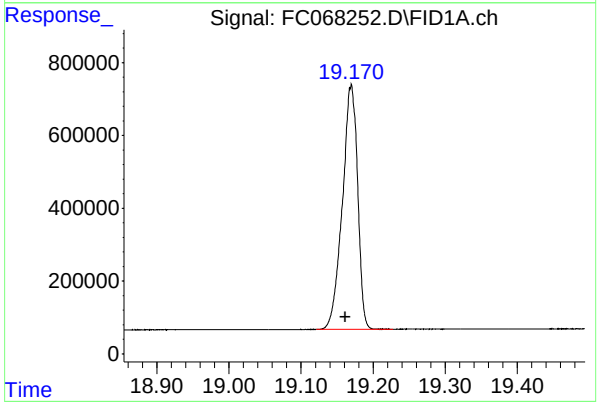
R.T.: 17.556 min
Delta R.T.: 0.007 min
Response: 11027160
Conc: 91.89 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
100 PPM ALIPHATIC HC STD1



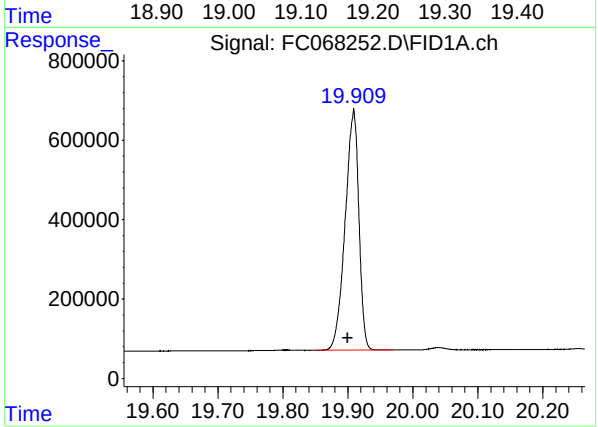

#18 n-Dotriacontane (C32)

R.T.: 18.388 min
Delta R.T.: 0.008 min
Response: 10599289
Conc: 91.71 ug/ml



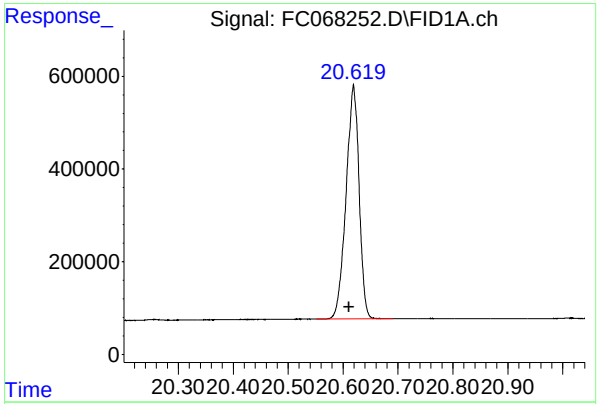

#19 n-Tetratriacontane (C34)

R.T.: 19.170 min
Delta R.T.: 0.008 min
Response: 9898762
Conc: 91.90 ug/ml




#20 n-Hexatriacontane (C36)

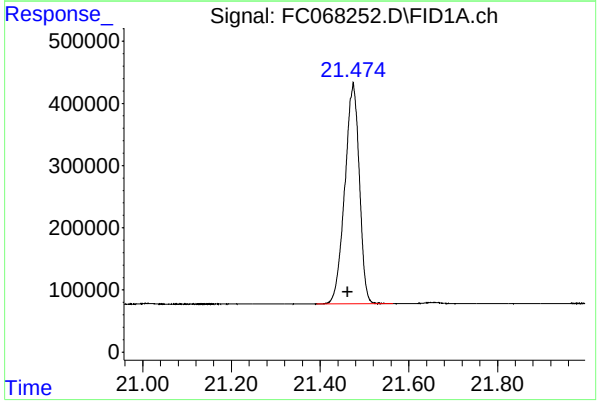
R.T.: 19.908 min
Delta R.T.: 0.008 min
Response: 8865949
Conc: 92.29 ug/ml




#21 n-Octatriacontane (C38)

R.T.: 20.619 min
Delta R.T.: 0.008 min
Response: 8293679
Conc: 91.94 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
100 PPM ALIPHATIC HC STD1




#22 n-Tetracontane (C40)

R.T.: 21.474 min
Delta R.T.: 0.012 min
Response: 8052023
Conc: 92.91 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC021125AL\
Data File : FC068252.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2025 16:24
Sample : 100 PPM ALIPHATIC HC STD1
Misc :
ALS Vial : 15 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Title : GC Extractables

Signal : FID1A.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 3.211 | 3.174 | 3.274 | BB | 1536067 | 13034849 | 89.69% | 5.069% |
| 2 | 4.270 | 4.234 | 4.328 | BB | 1438029 | 13187244 | 90.74% | 5.128% |
| 3 | 5.838 | 5.798 | 5.924 | BB | 1468511 | 14533716 | 100.00% | 5.651% |
| 4 | 6.280 | 6.228 | 6.341 | BB | 1303761 | 13108913 | 90.20% | 5.097% |
| 5 | 6.891 | 6.848 | 6.998 | BB | 1352654 | 13929436 | 95.84% | 5.416% |
| 6 | 8.068 | 8.028 | 8.131 | BB | 1162652 | 12728359 | 87.58% | 4.949% |
| 7 | 9.664 | 9.614 | 9.738 | BB | 1144286 | 12835513 | 88.32% | 4.991% |
| 8 | 11.104 | 11.058 | 11.178 | BB | 1054227 | 12748213 | 87.71% | 4.957% |
| 9 | 11.410 | 11.361 | 11.481 | BB | 1241101 | 14212174 | 97.79% | 5.526% |
| 10 | 12.408 | 12.361 | 12.474 | BB | 966080 | 12107311 | 83.30% | 4.708% |
| 11 | 12.849 | 12.781 | 12.914 | BB | 856617 | 10559687 | 72.66% | 4.106% |
| 12 | 13.019 | 12.974 | 13.081 | BB | 912197 | 11852411 | 81.55% | 4.609% |
| 13 | 13.604 | 13.558 | 13.668 | BB | 916235 | 11728617 | 80.70% | 4.561% |
| 14 | 14.704 | 14.628 | 14.768 | BB | 856005 | 11568914 | 79.60% | 4.499% |
| 15 | 15.723 | 15.634 | 15.784 | BB | 820737 | 11302843 | 77.77% | 4.395% |
| 16 | 16.671 | 16.598 | 16.734 | BB | 759899 | 10993221 | 75.64% | 4.275% |
| 17 | 17.556 | 17.484 | 17.624 | BB | 738963 | 11027160 | 75.87% | 4.288% |
| 18 | 18.388 | 18.318 | 18.451 | BB | 719758 | 10599289 | 72.93% | 4.122% |
| 19 | 19.170 | 19.121 | 19.228 | BB | 668913 | 9898762 | 68.11% | 3.849% |
| 20 | 19.908 | 19.851 | 19.969 | BBA | 593167 | 8865949 | 61.00% | 3.448% |
| 21 | 20.619 | 20.551 | 20.691 | BB | 499026 | 8293679 | 57.07% | 3.225% |
| 22 | 21.474 | 21.391 | 21.564 | BB | 353119 | 8052023 | 55.40% | 3.131% |
| | | | Sum of corrected areas: | | | 257168283 | | |

Aliphatic EPH 021125.M Tue Feb 11 02:39:04 2025

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

| | | | |
|---|---|---|---|
| Lab Sample ID: | 50 PPM ALIPHATIC HC S | Acq On: | 10 Feb 2025 17:01 |
| Client Sample ID: | | Operator: | YP/AJ |
| Data file: | FC068253.D | Misc: | |
| Instrument: | FID_C | ALS Vial: | 16 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | Units |
|---|---|---|---|---|---|
| Aliphatic C9-C12 | 3.107 | 6.373 | 20240186.000 | 150.000 | ug/ml |
| Aliphatic C12-C16 | 6.374 | 9.756 | 13091029.000 | 100.000 | ug/ml |
| Aliphatic C16-C21 | 9.757 | 13.110 | 18751121.000 | 150.000 | ug/ml |
| Aliphatic C21-C28 | 13.111 | 16.762 | 23234194.000 | 200.000 | ug/ml |
| Aliphatic C28-C40 | 16.763 | 21.563 | 29009865.000 | 300.000 | ug/ml |
| Aliphatic EPH | 3.107 | | 104326395.000 | 900.000 | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC021125AL\
Data File : FC068253.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2025 17:01
Operator : YP/AJ
Sample : 50 PPM ALIPHATIC HC STD2
Misc :
ALS Vial : 16 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
50 PPM ALIPHATIC HC STD2

Integration File: autoint1.e
Quant Time: Feb 11 02:30:10 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Tue Feb 11 02:29:33 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

| Compound | R.T. | Response | Conc Units |
|---|---|---|---|
| System Monitoring Compounds | | | |
| 9) S ortho-Terphenyl (SURR) | 11.404 | 7265657 | 47.326 ug/ml |
| Spiked Amount 50.000 | | Recovery = | 94.65% |
| 12) S 1-chlorooctadecane (S... | 12.845 | 5379642 | 47.631 ug/ml |
| Spiked Amount 50.000 | | Recovery = | 95.26% |
| Target Compounds | | | |
| 1) T n-Nonane (C9) | 3.209 | 6719412 | 47.428 ug/ml |
| 2) T n-Decane (C10) | 4.267 | 6784596 | 47.555 ug/ml |
| 3) T A~Naphthalene (C11.7) | 5.834 | 7434634 | 48.043 ug/ml |
| 4) T n-Dodecane (C12) | 6.276 | 6736178 | 47.696 ug/ml |
| 5) T A~2-methylnaphthalene... | 6.887 | 7096295 | 48.391 ug/ml |
| 6) T n-Tetradecane (C14) | 8.065 | 6521596 | 47.844 ug/ml |
| 7) T n-Hexadecane (C16) | 9.660 | 6569433 | 47.850 ug/ml |
| 8) T n-Octadecane (C18) | 11.099 | 6516282 | 47.555 ug/ml |
| 10) T n-Eicosane (C20) | 12.404 | 6182901 | 47.362 ug/ml |
| 11) T n-Heneicosane (C21) | 13.014 | 6051938 | 47.351 ug/ml |
| 13) T n-Docosane (C22) | 13.599 | 5978682 | 47.357 ug/ml |
| 14) T n-Tetracosane (C24) | 14.700 | 5893630 | 47.329 ug/ml |
| 15) T n-Hexacosane (C26) | 15.718 | 5756725 | 47.224 ug/ml |
| 16) T n-Octacosane (C28) | 16.665 | 5605157 | 47.073 ug/ml |
| 17) T n-Tricontane (C30) | 17.551 | 5630196 | 46.917 ug/ml |
| 18) T n-Dotriacontane (C32) | 18.383 | 5417986 | 46.879 ug/ml |
| 19) T n-Tetratriacontane (C34) | 19.165 | 5059593 | 46.973 ug/ml |
| 20) T n-Hexatriacontane (C36) | 19.902 | 4533198 | 47.188 ug/ml |
| 21) T n-Octatriacontane (C38) | 20.614 | 4246406 | 47.073 ug/ml |
| 22) T n-Tetracontane (C40) | 21.465 | 4122486 | 47.570 ug/ml |

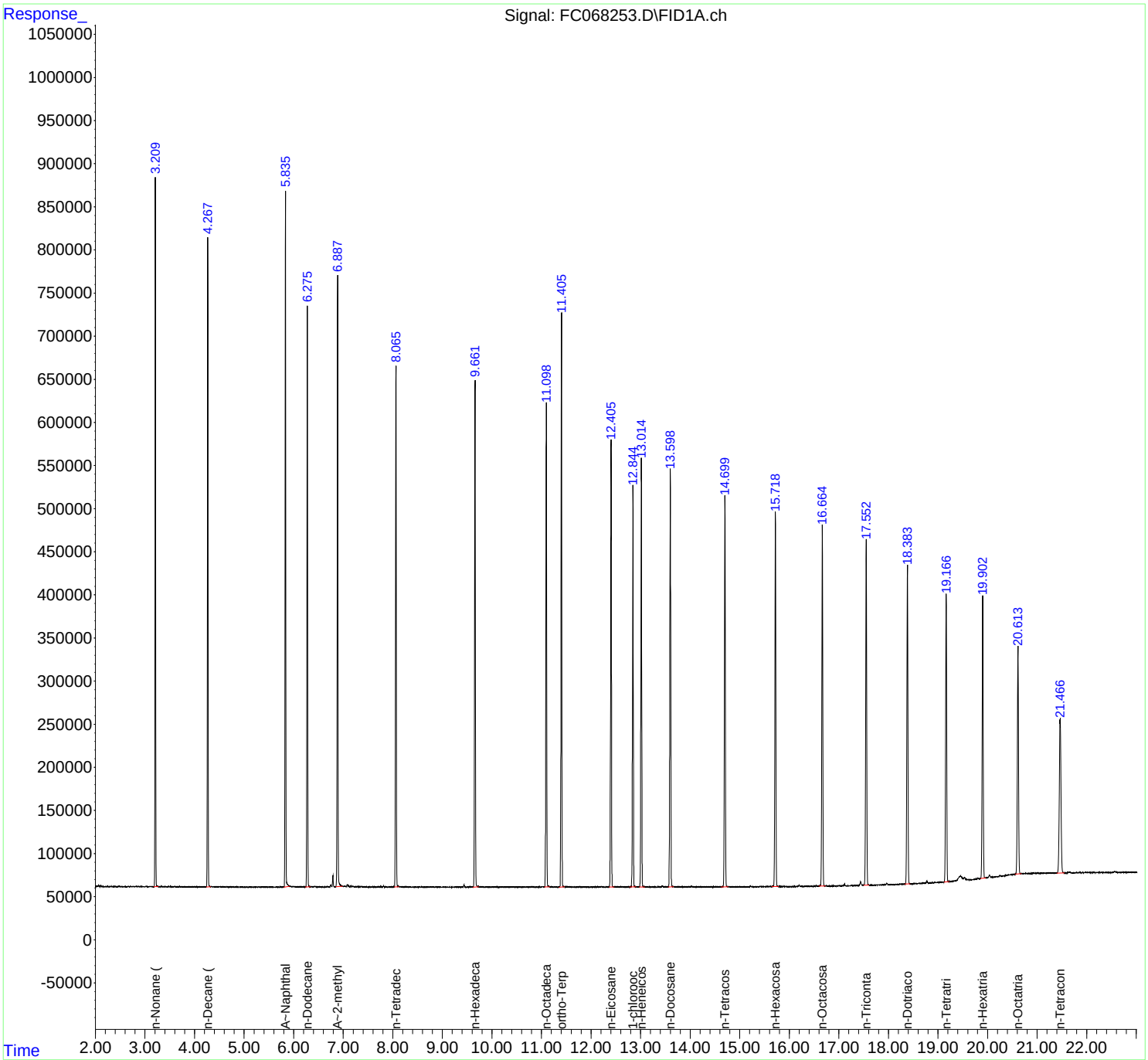
(f)=RT Delta > 1/2 Window (m)=manual int.

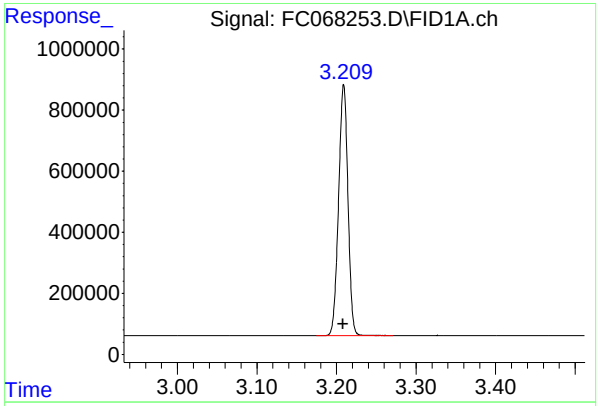
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC021125AL\
Data File : FC068253.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2025 17:01
Operator : YP/AJ
Sample : 50 PPM ALIPHATIC HC STD2
Misc :
ALS Vial : 16 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
50 PPM ALIPHATIC HC STD2

Integration File: autoint1.e
Quant Time: Feb 11 02:30:10 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Tue Feb 11 02:29:33 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

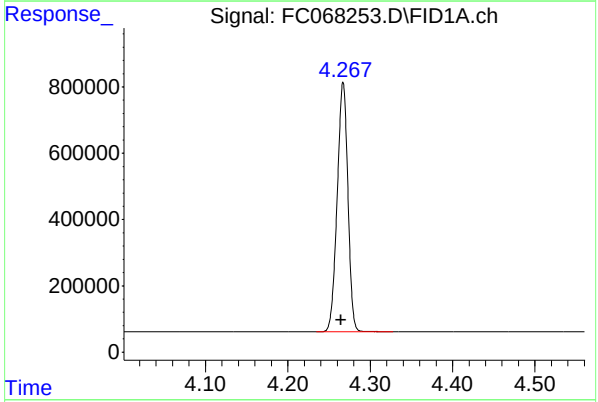





#1 n-Nonane (C9)

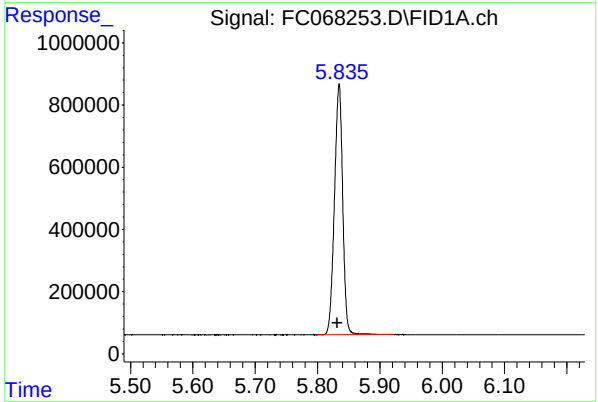
R.T.: 3.209 min
Delta R.T.: 0.000 min
Response: 6719412
Conc: 47.43 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
50 PPM ALIPHATIC HC STD2



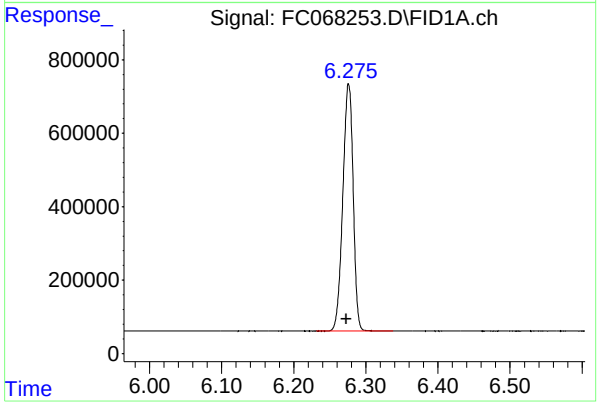

#2 n-Decane (C10)

R.T.: 4.267 min
Delta R.T.: 0.002 min
Response: 6784596
Conc: 47.56 ug/ml



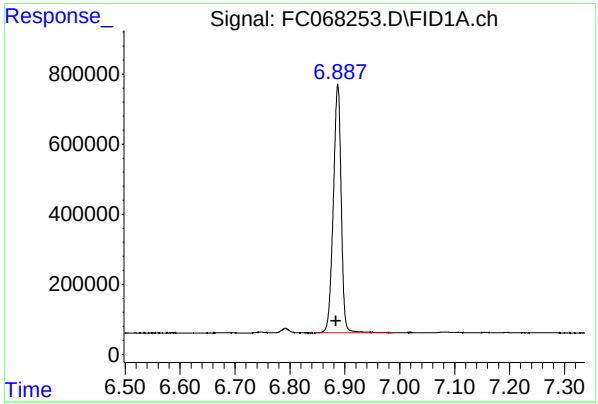

#3 A~Naphthalene (C11.7)

R.T.: 5.834 min
Delta R.T.: 0.003 min
Response: 7434634
Conc: 48.04 ug/ml




#4 n-Dodecane (C12)

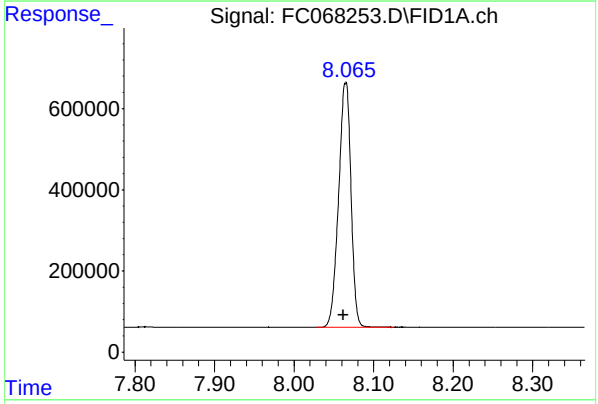
R.T.: 6.276 min
Delta R.T.: 0.003 min
Response: 6736178
Conc: 47.70 ug/ml




#5 A~2-methylnaphthalene (C12.89)

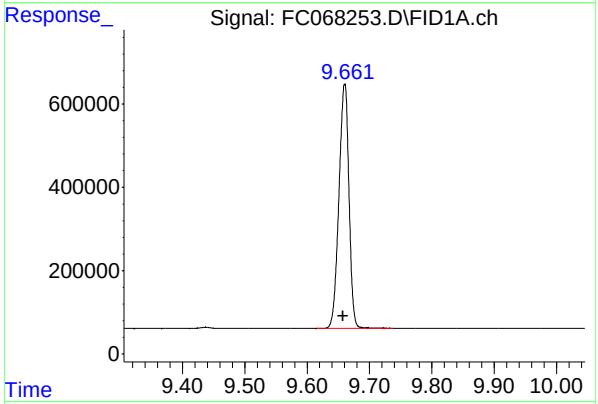
R.T.: 6.887 min
Delta R.T.: 0.003 min
Response: 7096295
Conc: 48.39 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
50 PPM ALIPHATIC HC STD2



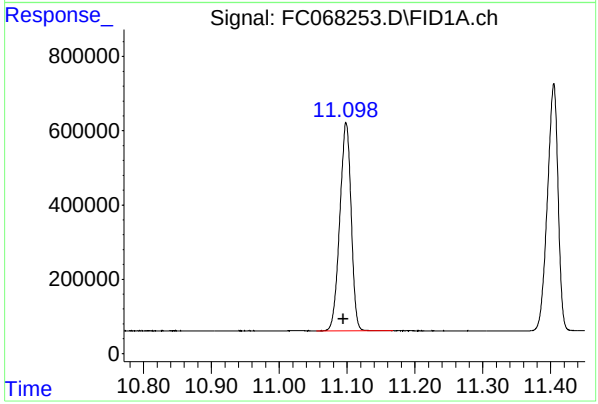

#6 n-Tetradecane (C14)

R.T.: 8.065 min
Delta R.T.: 0.003 min
Response: 6521596
Conc: 47.84 ug/ml



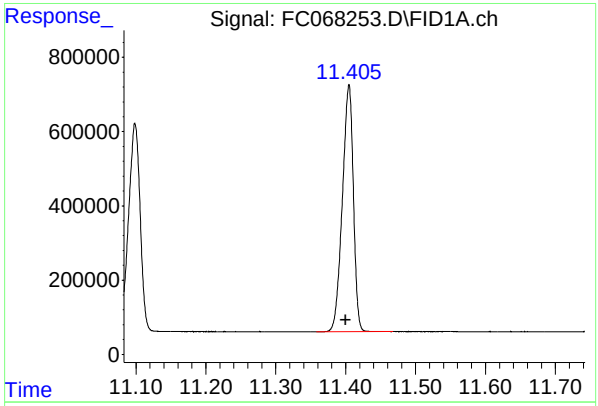

#7 n-Hexadecane (C16)

R.T.: 9.660 min
Delta R.T.: 0.003 min
Response: 6569433
Conc: 47.85 ug/ml




#8 n-Octadecane (C18)

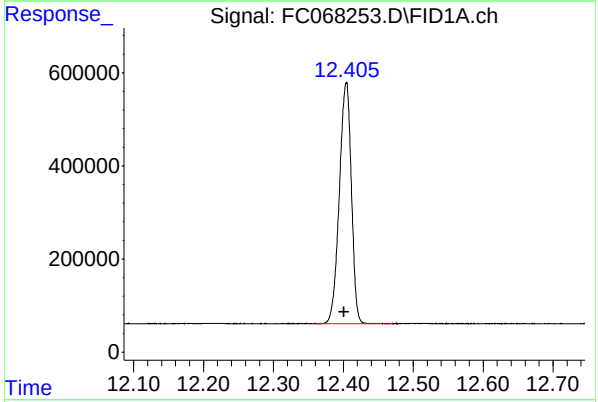
R.T.: 11.099 min
Delta R.T.: 0.004 min
Response: 6516282
Conc: 47.55 ug/ml




#9 ortho-Terphenyl (SURR)

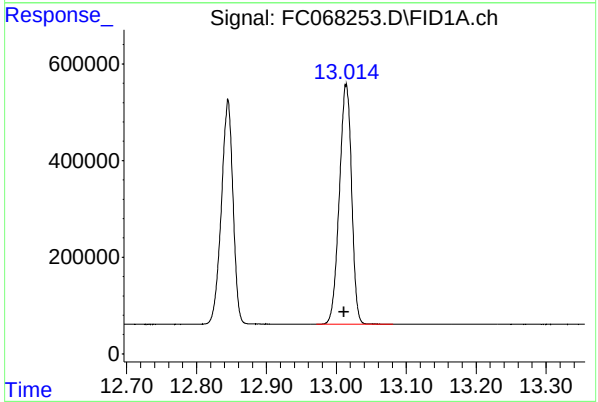
R.T.: 11.404 min
Delta R.T.: 0.005 min
Response: 7265657
Conc: 47.33 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
50 PPM ALIPHATIC HC STD2



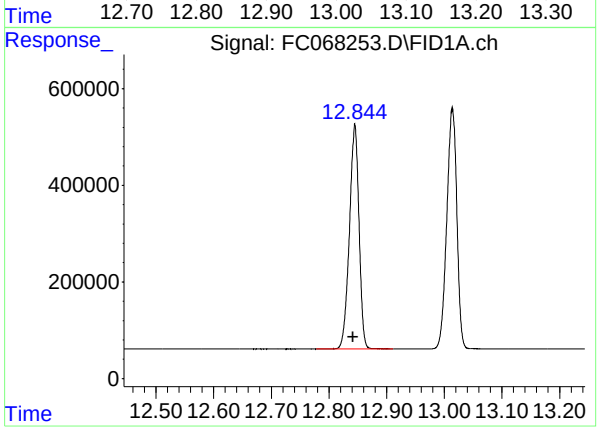

#10 n-Eicosane (C20)

R.T.: 12.404 min
Delta R.T.: 0.003 min
Response: 6182901
Conc: 47.36 ug/ml



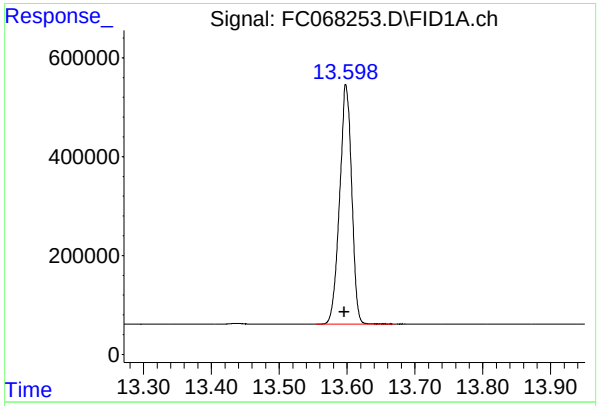

#11 n-Heneicosane (C21)

R.T.: 13.014 min
Delta R.T.: 0.003 min
Response: 6051938
Conc: 47.35 ug/ml




#12 1-chlorooctadecane (SURR)

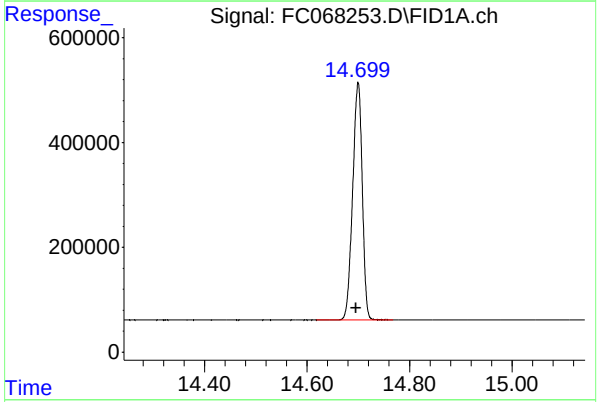
R.T.: 12.845 min
Delta R.T.: 0.003 min
Response: 5379642
Conc: 47.63 ug/ml




#13 n-Docosane (C22)

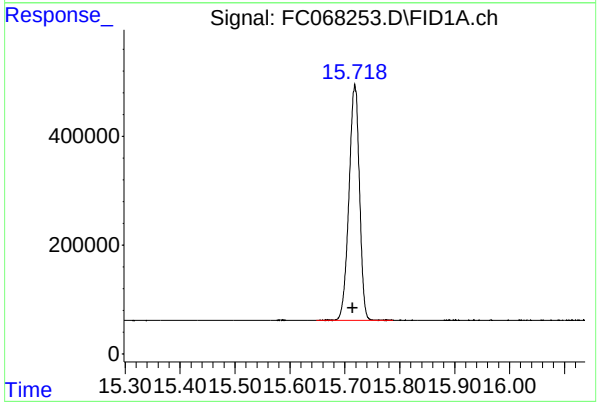
R.T.: 13.599 min
Delta R.T.: 0.003 min
Response: 5978682
Conc: 47.36 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
50 PPM ALIPHATIC HC STD2



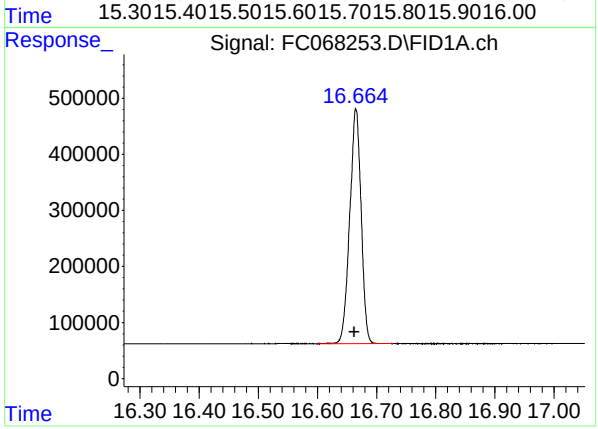

#14 n-Tetracosane (C24)

R.T.: 14.700 min
Delta R.T.: 0.004 min
Response: 5893630
Conc: 47.33 ug/ml



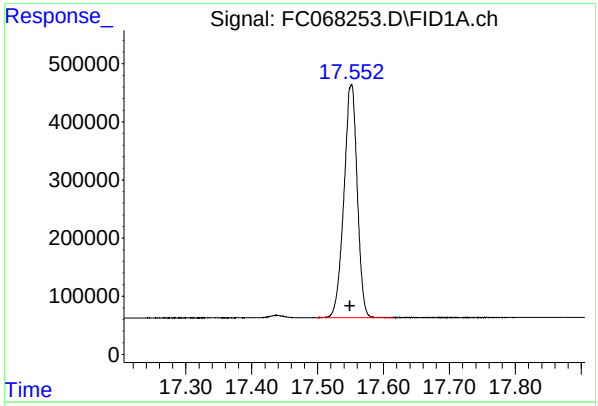

#15 n-Hexacosane (C26)

R.T.: 15.718 min
Delta R.T.: 0.004 min
Response: 5756725
Conc: 47.22 ug/ml




#16 n-Octacosane (C28)

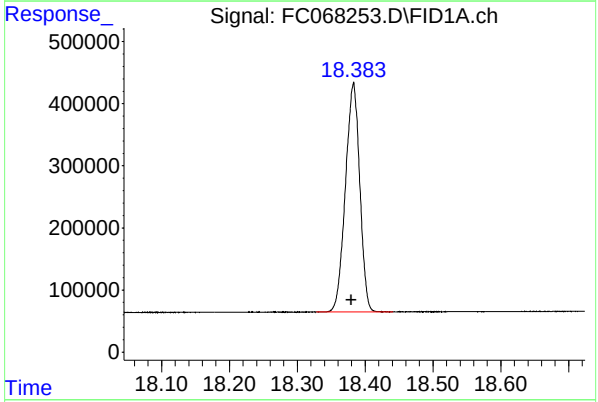
R.T.: 16.665 min
Delta R.T.: 0.003 min
Response: 5605157
Conc: 47.07 ug/ml




#17 n-Tricontane (C30)

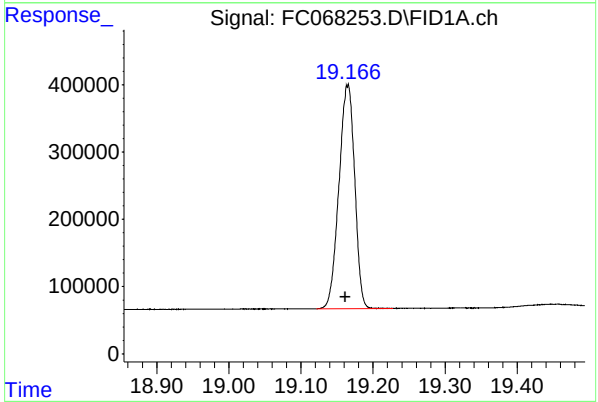
R.T.: 17.551 min
Delta R.T.: 0.002 min
Response: 5630196
Conc: 46.92 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
50 PPM ALIPHATIC HC STD2



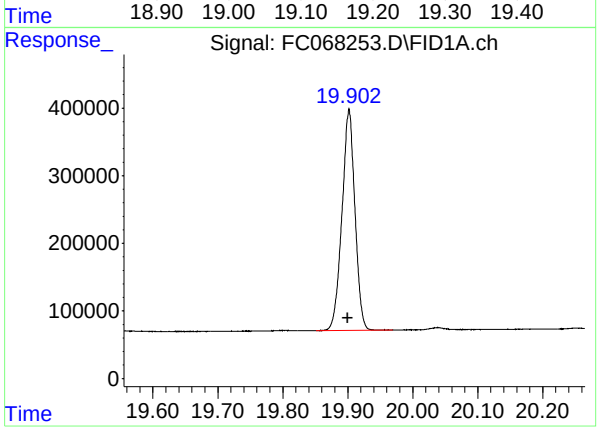

#18 n-Dotriacontane (C32)

R.T.: 18.383 min
Delta R.T.: 0.003 min
Response: 5417986
Conc: 46.88 ug/ml



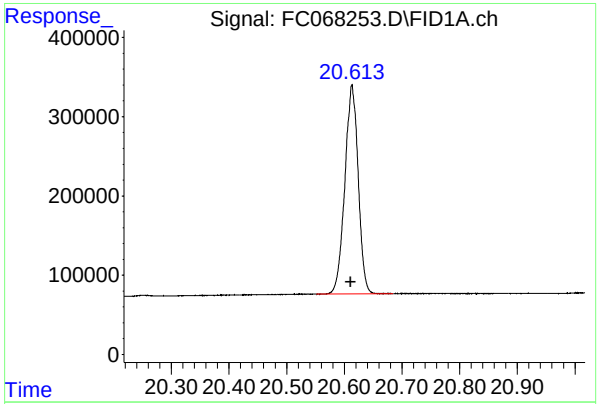

#19 n-Tetratriacontane (C34)

R.T.: 19.165 min
Delta R.T.: 0.004 min
Response: 5059593
Conc: 46.97 ug/ml




#20 n-Hexatriacontane (C36)

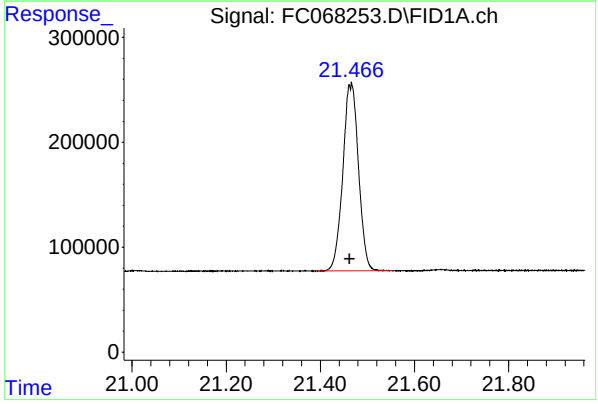
R.T.: 19.902 min
Delta R.T.: 0.002 min
Response: 4533198
Conc: 47.19 ug/ml




#21 n-Octatriacontane (C38)

R.T.: 20.614 min
Delta R.T.: 0.003 min
Response: 4246406
Conc: 47.07 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
50 PPM ALIPHATIC HC STD2




#22 n-Tetracontane (C40)

R.T.: 21.465 min
Delta R.T.: 0.002 min
Response: 4122486
Conc: 47.57 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC021125AL\
Data File : FC068253.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2025 17:01
Sample : 50 PPM ALIPHATIC HC STD2
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Title : GC Extractables

Signal : FID1A.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 3.209 | 3.174 | 3.271 | BB | 811218 | 6719412 | 90.38% | 5.110% |
| 2 | 4.267 | 4.234 | 4.328 | BB | 755911 | 6784596 | 91.26% | 5.159% |
| 3 | 5.834 | 5.798 | 5.921 | BB | 804975 | 7434634 | 100.00% | 5.654% |
| 4 | 6.276 | 6.231 | 6.338 | BB | 678512 | 6736178 | 90.61% | 5.122% |
| 5 | 6.887 | 6.848 | 6.988 | BB | 711876 | 7096295 | 95.45% | 5.396% |
| 6 | 8.065 | 8.028 | 8.124 | BB | 605991 | 6521596 | 87.72% | 4.959% |
| 7 | 9.660 | 9.614 | 9.738 | BB | 593828 | 6569433 | 88.36% | 4.996% |
| 8 | 11.099 | 11.054 | 11.168 | BB | 559745 | 6516282 | 87.65% | 4.955% |
| 9 | 11.404 | 11.358 | 11.468 | BB | 664804 | 7265657 | 97.73% | 5.525% |
| 10 | 12.404 | 12.361 | 12.471 | BB | 520586 | 6182901 | 83.16% | 4.702% |
| 11 | 12.845 | 12.778 | 12.911 | BB | 460356 | 5379642 | 72.36% | 4.091% |
| 12 | 13.014 | 12.971 | 13.081 | BB | 497432 | 6051938 | 81.40% | 4.602% |
| 13 | 13.599 | 13.554 | 13.668 | BB | 486709 | 5978682 | 80.42% | 4.546% |
| 14 | 14.700 | 14.618 | 14.768 | BB | 455435 | 5893630 | 79.27% | 4.482% |
| 15 | 15.718 | 15.648 | 15.788 | BB | 431622 | 5756725 | 77.43% | 4.378% |
| 16 | 16.665 | 16.598 | 16.728 | BB | 419236 | 5605157 | 75.39% | 4.262% |
| 17 | 17.551 | 17.498 | 17.614 | BB | 400816 | 5630196 | 75.73% | 4.281% |
| 18 | 18.383 | 18.328 | 18.441 | BB | 366233 | 5417986 | 72.87% | 4.120% |
| 19 | 19.165 | 19.121 | 19.228 | BB | 333071 | 5059593 | 68.05% | 3.848% |
| 20 | 19.902 | 19.851 | 19.969 | BBA | 324588 | 4533198 | 60.97% | 3.447% |
| 21 | 20.614 | 20.551 | 20.684 | BB | 260933 | 4246406 | 57.12% | 3.229% |
| 22 | 21.465 | 21.391 | 21.554 | BB | 175049 | 4122486 | 55.45% | 3.135% |
| | | | Sum of corrected areas: | | | 131502620 | | |

Aliphatic EPH 021125.M Tue Feb 11 02:39:29 2025

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

| | | | |
|---|---|---|---|
| Lab Sample ID: | 20 PPM ALIPHATIC HC S | Acq On: | 10 Feb 2025 17:38 |
| Client Sample ID: | | Operator: | YP/AJ |
| Data file: | FC068254.D | Misc: | |
| Instrument: | FID_C | ALS Vial: | 17 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | Units |
|---|---|---|---|---|---|
| Aliphatic C9-C12 | 3.107 | 6.373 | 8511519.000 | 60.000 | ug/ml |
| Aliphatic C12-C16 | 6.374 | 9.756 | 5472087.000 | 40.000 | ug/ml |
| Aliphatic C16-C21 | 9.757 | 13.110 | 7907675.000 | 60.000 | ug/ml |
| Aliphatic C21-C28 | 13.111 | 16.762 | 9834944.000 | 80.000 | ug/ml |
| Aliphatic C28-C40 | 16.763 | 21.563 | 12324513.000 | 120.000 | ug/ml |
| Aliphatic EPH | 3.107 | | 44050738.000 | 360.000 | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC021125AL\
Data File : FC068254.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2025 17:38
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD3
Misc :
ALS Vial : 17 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD3

Integration File: autoint1.e
Quant Time: Feb 11 02:30:21 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Tue Feb 11 02:29:33 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

| | Compound | R.T. | Response | Conc Units |
|---|---|---|---|---|
| | **System Monitoring Compounds** | | | |
| 9) S | ortho-Terphenyl (SURR) | 11.400 | 3070458 | 20.000 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 40.00% |
| 12) S | 1-chlorooctadecane (S... | 12.842 | 2258872 | 20.000 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 40.00% |
| | **Target Compounds** | | | |
| 1) T | n-Nonane (C9) | 3.208 | 2833506 | 20.000 ug/ml |
| 2) T | n-Decane (C10) | 4.265 | 2853357 | 20.000 ug/ml |
| 3) T | A~Naphthalene (C11.7) | 5.831 | 3094970 | 20.000 ug/ml |
| 4) T | n-Dodecane (C12) | 6.273 | 2824656 | 20.000 ug/ml |
| 5) T | A~2-methylnaphthalene... | 6.884 | 2932900 | 20.000 ug/ml |
| 6) T | n-Tetradecane (C14) | 8.062 | 2726217 | 20.000 ug/ml |
| 7) T | n-Hexadecane (C16) | 9.657 | 2745870 | 20.000 ug/ml |
| 8) T | n-Octadecane (C18) | 11.095 | 2740539 | 20.000 ug/ml |
| 10) T | n-Eicosane (C20) | 12.401 | 2610929 | 20.000 ug/ml |
| 11) T | n-Heneicosane (C21) | 13.011 | 2556207 | 20.000 ug/ml |
| 13) T | n-Docosane (C22) | 13.596 | 2524938 | 20.000 ug/ml |
| 14) T | n-Tetracosane (C24) | 14.696 | 2490472 | 20.000 ug/ml |
| 15) T | n-Hexacosane (C26) | 15.714 | 2438036 | 20.000 ug/ml |
| 16) T | n-Octacosane (C28) | 16.662 | 2381498 | 20.000 ug/ml |
| 17) T | n-Tricontane (C30) | 17.549 | 2400071 | 20.000 ug/ml |
| 18) T | n-Dotriacontane (C32) | 18.380 | 2311459 | 20.000 ug/ml |
| 19) T | n-Tetratriacontane (C34) | 19.161 | 2154239 | 20.000 ug/ml |
| 20) T | n-Hexatriacontane (C36) | 19.900 | 1921336 | 20.000 ug/ml |
| 21) T | n-Octatriacontane (C38) | 20.611 | 1804172 | 20.000 ug/ml |
| 22) T | n-Tetracontane (C40) | 21.463 | 1733236 | 20.000 ug/ml |

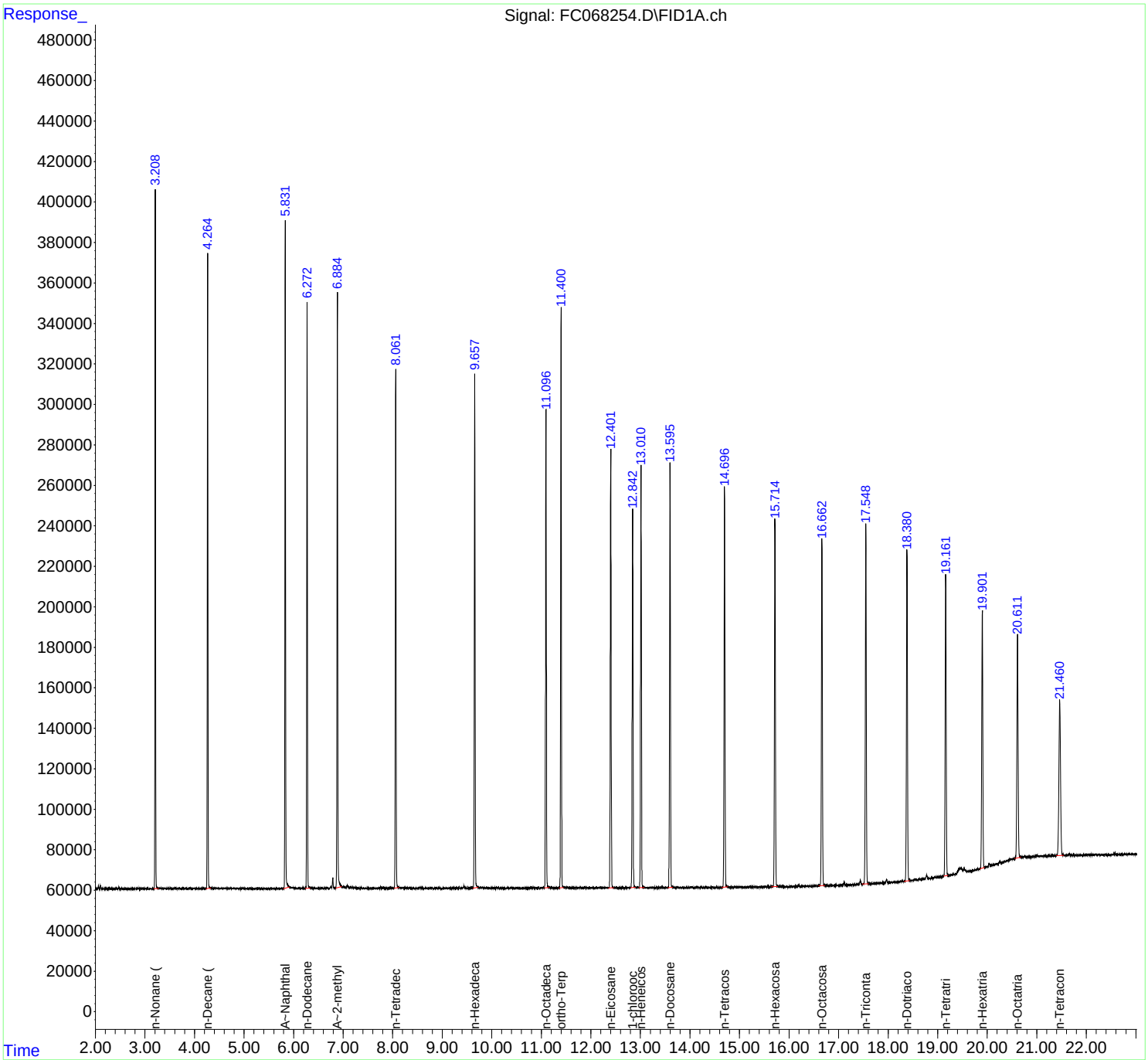
(f)=RT Delta > 1/2 Window (m)=manual int.

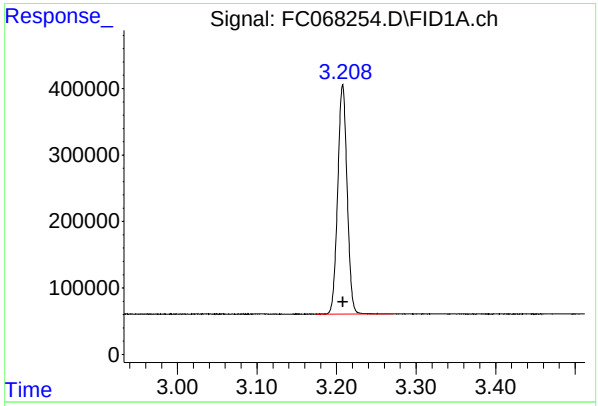
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC021125AL\
Data File : FC068254.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2025 17:38
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD3
Misc :
ALS Vial : 17 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD3

Integration File: autoint1.e
Quant Time: Feb 11 02:30:21 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Tue Feb 11 02:29:33 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

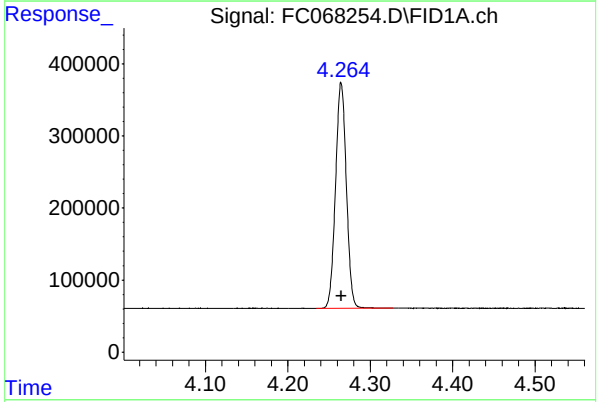





#1 n-Nonane (C9)

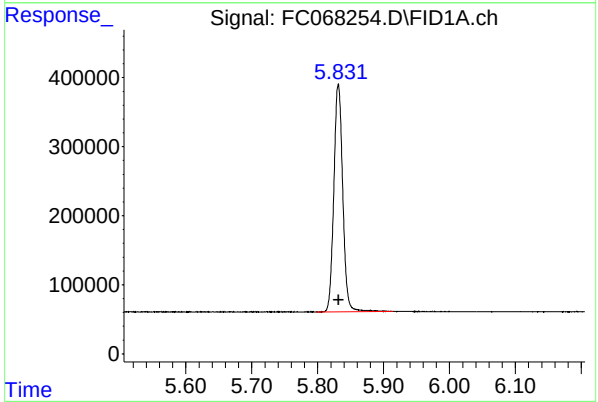
R.T.: 3.208 min
Delta R.T.: 0.000 min
Response: 2833506
Conc: 20.00 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD3



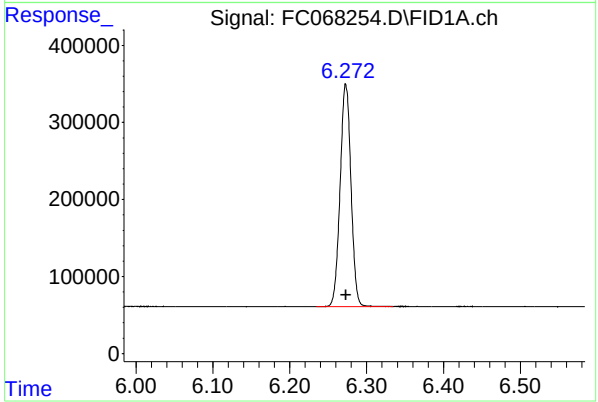

#2 n-Decane (C10)

R.T.: 4.265 min
Delta R.T.: 0.000 min
Response: 2853357
Conc: 20.00 ug/ml



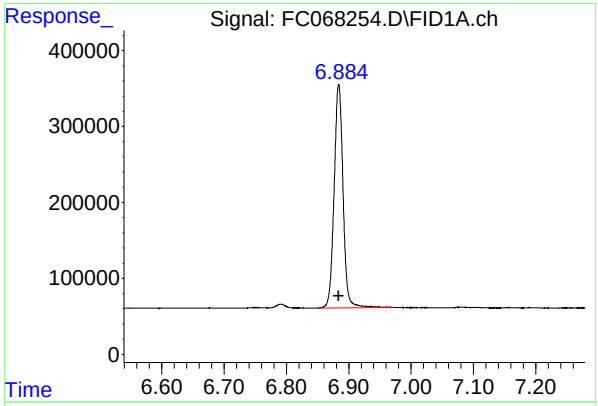

#3 A~Naphthalene (C11.7)

R.T.: 5.831 min
Delta R.T.: 0.000 min
Response: 3094970
Conc: 20.00 ug/ml




#4 n-Dodecane (C12)

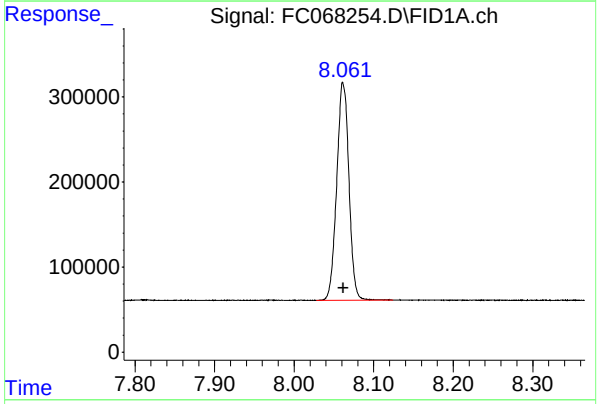
R.T.: 6.273 min
Delta R.T.: 0.000 min
Response: 2824656
Conc: 20.00 ug/ml




#5 A~2-methylnaphthalene (C12.89)

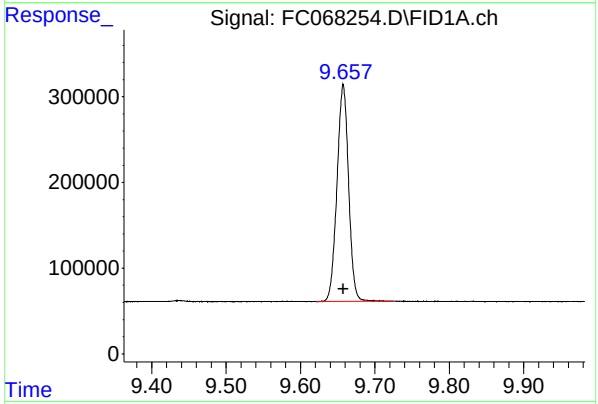
R.T.: 6.884 min
Delta R.T.: 0.000 min
Response: 2932900
Conc: 20.00 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD3



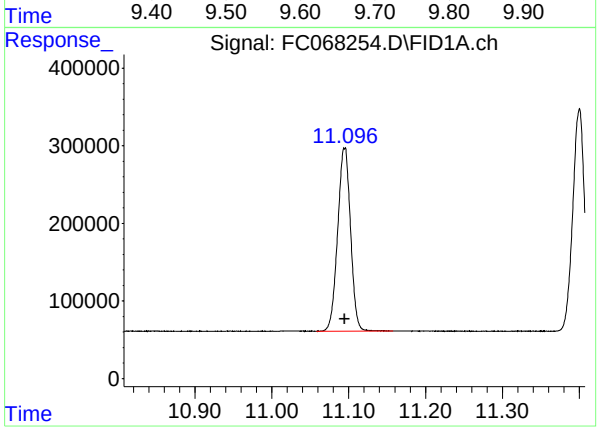

#6 n-Tetradecane (C14)

R.T.: 8.062 min
Delta R.T.: 0.000 min
Response: 2726217
Conc: 20.00 ug/ml



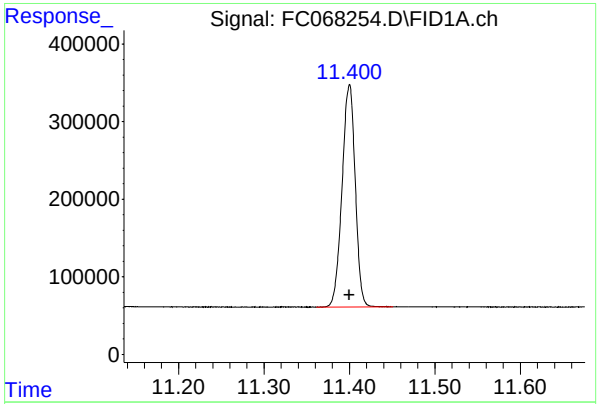

#7 n-Hexadecane (C16)

R.T.: 9.657 min
Delta R.T.: 0.000 min
Response: 2745870
Conc: 20.00 ug/ml




#8 n-Octadecane (C18)

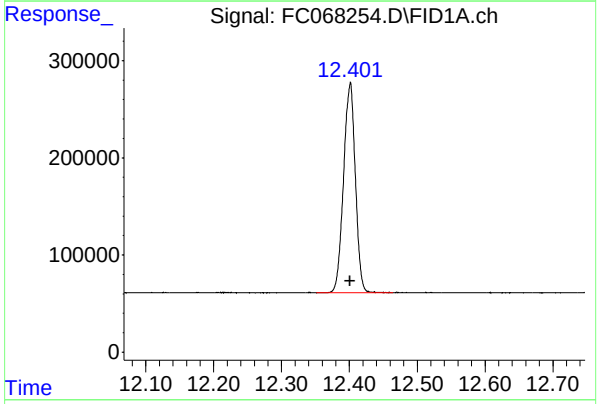
R.T.: 11.095 min
Delta R.T.: 0.000 min
Response: 2740539
Conc: 20.00 ug/ml




#9 ortho-Terphenyl (SURR)

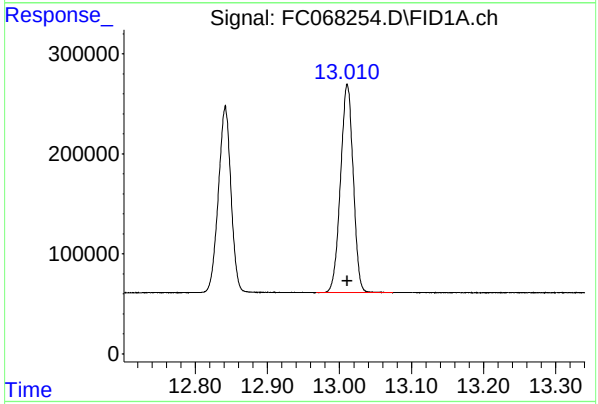
R.T.: 11.400 min
Delta R.T.: 0.000 min
Response: 3070458
Conc: 20.00 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD3



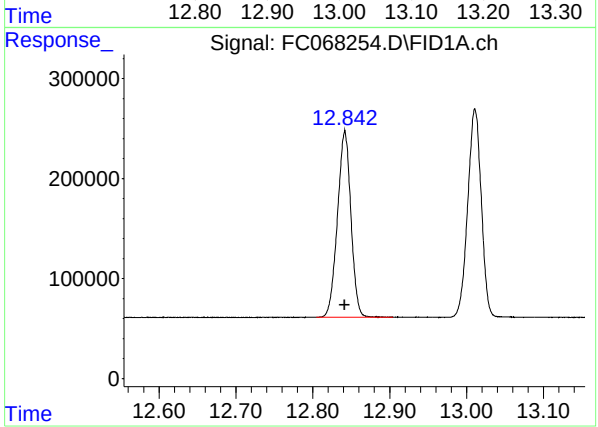

#10 n-Eicosane (C20)

R.T.: 12.401 min
Delta R.T.: 0.000 min
Response: 2610929
Conc: 20.00 ug/ml



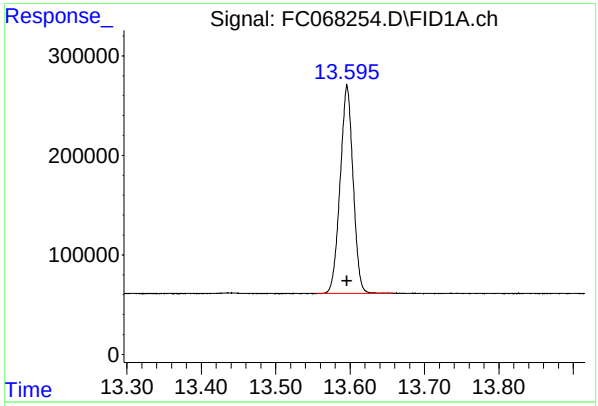

#11 n-Heneicosane (C21)

R.T.: 13.011 min
Delta R.T.: 0.000 min
Response: 2556207
Conc: 20.00 ug/ml




#12 1-chlorooctadecane (SURR)

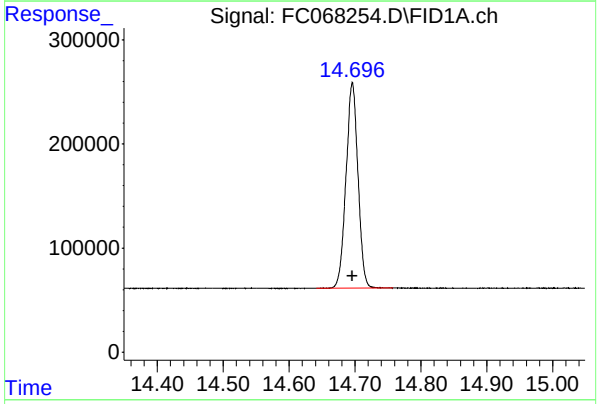
R.T.: 12.842 min
Delta R.T.: 0.000 min
Response: 2258872
Conc: 20.00 ug/ml




#13 n-Docosane (C22)

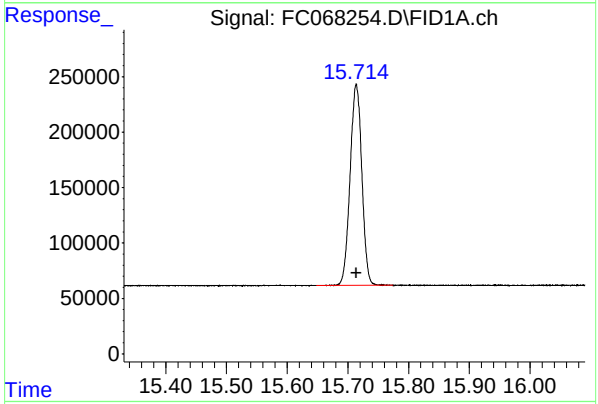
R.T.: 13.596 min
Delta R.T.: 0.000 min
Response: 2524938
Conc: 20.00 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD3



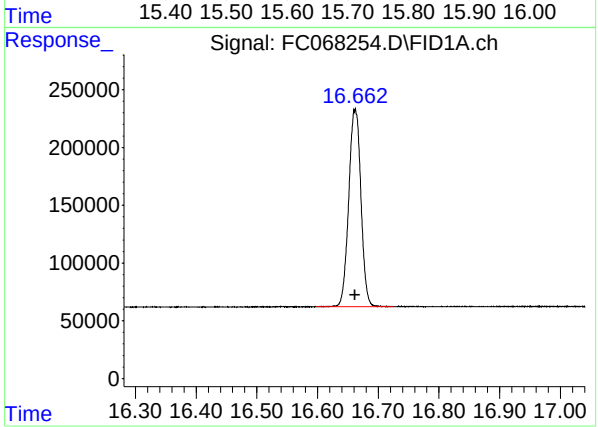

#14 n-Tetracosane (C24)

R.T.: 14.696 min
Delta R.T.: 0.000 min
Response: 2490472
Conc: 20.00 ug/ml



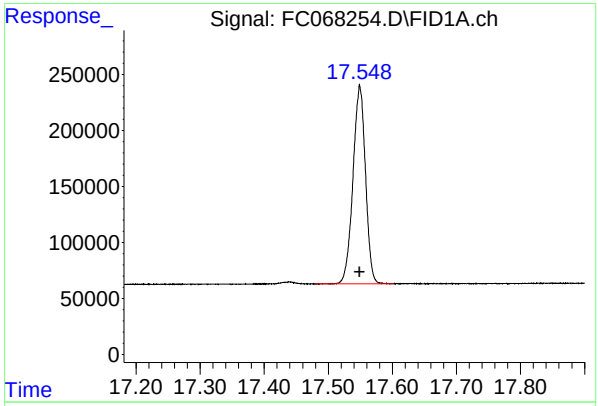

#15 n-Hexacosane (C26)

R.T.: 15.714 min
Delta R.T.: 0.000 min
Response: 2438036
Conc: 20.00 ug/ml




#16 n-Octacosane (C28)

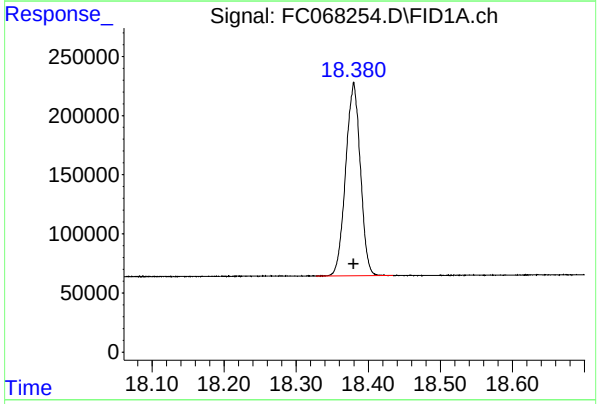
R.T.: 16.662 min
Delta R.T.: 0.000 min
Response: 2381498
Conc: 20.00 ug/ml




#17 n-Tricontane (C30)

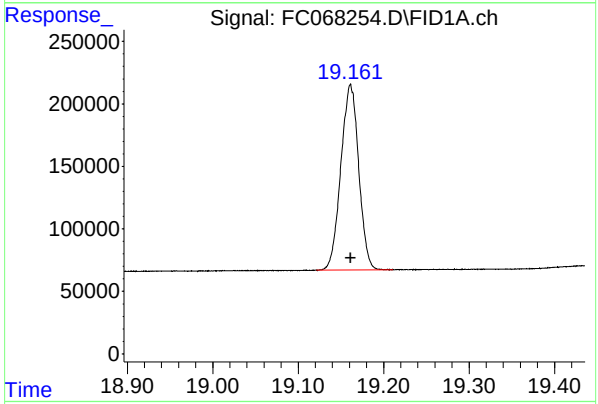
R.T.: 17.549 min
Delta R.T.: 0.000 min
Response: 2400071
Conc: 20.00 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD3



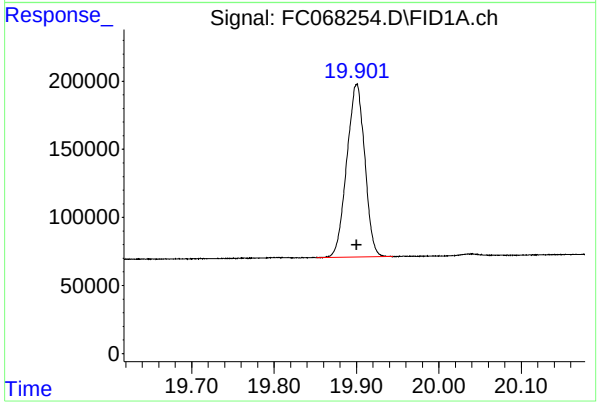

#18 n-Dotriacontane (C32)

R.T.: 18.380 min
Delta R.T.: 0.000 min
Response: 2311459
Conc: 20.00 ug/ml



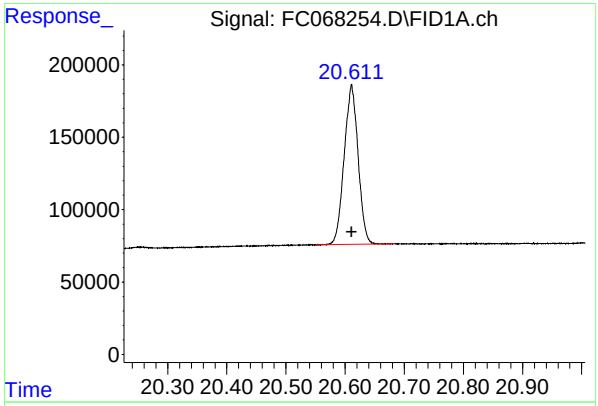

#19 n-Tetratriacontane (C34)

R.T.: 19.161 min
Delta R.T.: 0.000 min
Response: 2154239
Conc: 20.00 ug/ml




#20 n-Hexatriacontane (C36)

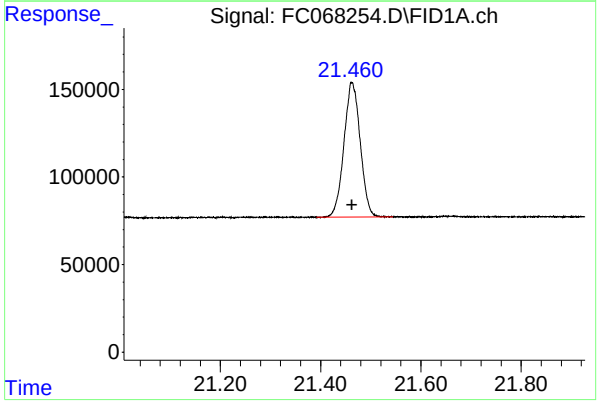
R.T.: 19.900 min
Delta R.T.: 0.000 min
Response: 1921336
Conc: 20.00 ug/ml




#21 n-Octatriacontane (C38)

R.T.: 20.611 min
Delta R.T.: 0.000 min
Response: 1804172
Conc: 20.00 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD3




#22 n-Tetracontane (C40)

R.T.: 21.463 min
Delta R.T.: 0.000 min
Response: 1733236
Conc: 20.00 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC021125AL\
Data File : FC068254.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2025 17:38
Sample : 20 PPM ALIPHATIC HC STD3
Misc :
ALS Vial : 17 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Title : GC Extractables

Signal : FID1A.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 3.208 | 3.174 | 3.271 | BB | 344103 | 2833506 | 91.55% | 5.114% |
| 2 | 4.265 | 4.234 | 4.328 | BB | 312569 | 2853357 | 92.19% | 5.150% |
| 3 | 5.831 | 5.798 | 5.914 | BB | 329933 | 3094970 | 100.00% | 5.586% |
| 4 | 6.273 | 6.234 | 6.334 | BB | 287834 | 2824656 | 91.27% | 5.098% |
| 5 | 6.884 | 6.848 | 6.971 | BB | 294443 | 2932900 | 94.76% | 5.293% |
| 6 | 8.062 | 8.028 | 8.124 | BB | 257216 | 2726217 | 88.09% | 4.920% |
| 7 | 9.657 | 9.621 | 9.724 | BB | 252359 | 2745870 | 88.72% | 4.956% |
| 8 | 11.095 | 11.058 | 11.158 | BB | 236897 | 2740539 | 88.55% | 4.946% |
| 9 | 11.400 | 11.361 | 11.451 | BB | 288971 | 3070458 | 99.21% | 5.542% |
| 10 | 12.401 | 12.351 | 12.464 | BB | 215019 | 2610929 | 84.36% | 4.712% |
| 11 | 12.842 | 12.804 | 12.904 | BB | 185197 | 2258872 | 72.99% | 4.077% |
| 12 | 13.011 | 12.968 | 13.074 | BB | 208305 | 2556207 | 82.59% | 4.613% |
| 13 | 13.596 | 13.554 | 13.658 | BB | 206427 | 2524938 | 81.58% | 4.557% |
| 14 | 14.696 | 14.641 | 14.758 | BB | 197006 | 2490472 | 80.47% | 4.495% |
| 15 | 15.714 | 15.648 | 15.774 | BB | 180907 | 2438036 | 78.77% | 4.400% |
| 16 | 16.662 | 16.598 | 16.724 | BB | 171177 | 2381498 | 76.95% | 4.298% |
| 17 | 17.549 | 17.481 | 17.601 | BB | 174807 | 2400071 | 77.55% | 4.332% |
| 18 | 18.380 | 18.328 | 18.434 | BB | 162329 | 2311459 | 74.68% | 4.172% |
| 19 | 19.161 | 19.121 | 19.211 | BB | 148420 | 2154239 | 69.60% | 3.888% |
| 20 | 19.900 | 19.851 | 19.944 | BB | 127484 | 1921336 | 62.08% | 3.468% |
| 21 | 20.611 | 20.551 | 20.681 | BB | 109957 | 1804172 | 58.29% | 3.256% |
| 22 | 21.463 | 21.391 | 21.544 | BB | 77234 | 1733236 | 56.00% | 3.128% |
| | | | Sum of corrected areas: | | | 55407934 | | |

Aliphatic EPH 021125.M Tue Feb 11 02:39:47 2025

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

| | | | |
|---|---|---|---|
| Lab Sample ID: | 10 PPM ALIPHATIC HC S | Acq On: | 10 Feb 2025 18:14 |
| Client Sample ID: | | Operator: | YP/AJ |
| Data file: | FC068255.D | Misc: | |
| Instrument: | FID_C | ALS Vial: | 18 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | Units |
|---|---|---|---|---|---|
| Aliphatic C9-C12 | 3.107 | 6.373 | 4474674.000 | 30.000 | ug/ml |
| Aliphatic C12-C16 | 6.374 | 9.756 | 2866719.000 | 20.000 | ug/ml |
| Aliphatic C16-C21 | 9.757 | 13.110 | 4144581.000 | 30.000 | ug/ml |
| Aliphatic C21-C28 | 13.111 | 16.762 | 5144532.000 | 40.000 | ug/ml |
| Aliphatic C28-C40 | 16.763 | 21.563 | 6514067.000 | 60.000 | ug/ml |
| Aliphatic EPH | 3.107 | | 23144573.000 | 180.000 | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC021125AL\
Data File : FC068255.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2025 18:14
Operator : YP/AJ
Sample : 10 PPM ALIPHATIC HC STD4
Misc :
ALS Vial : 18 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
10 PPM ALIPHATIC HC STD4

Integration File: autoint1.e
Quant Time: Feb 11 02:30:29 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Tue Feb 11 02:29:33 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

| | Compound | R.T. | Response | Conc Units |
|---|---|---|---|---|
| | **System Monitoring Compounds** | | | |
| 9) S | ortho-Terphenyl (SURR) | 11.398 | 1614436 | 10.516 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 21.03% |
| 12) S | 1-chlorooctadecane (S... | 12.840 | 1174811 | 10.402 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 20.80% |
| | **Target Compounds** | | | |
| 1) T | n-Nonane (C9) | 3.208 | 1490390 | 10.520 ug/ml |
| 2) T | n-Decane (C10) | 4.265 | 1497516 | 10.497 ug/ml |
| 3) T | A~Naphthalene (C11.7) | 5.832 | 1604467 | 10.368 ug/ml |
| 4) T | n-Dodecane (C12) | 6.273 | 1486768 | 10.527 ug/ml |
| 5) T | A~2-methylnaphthalene... | 6.884 | 1503396 | 10.252 ug/ml |
| 6) T | n-Tetradecane (C14) | 8.061 | 1434684 | 10.525 ug/ml |
| 7) T | n-Hexadecane (C16) | 9.656 | 1432035 | 10.430 ug/ml |
| 8) T | n-Octadecane (C18) | 11.093 | 1433269 | 10.460 ug/ml |
| 10) T | n-Eicosane (C20) | 12.400 | 1367303 | 10.474 ug/ml |
| 11) T | n-Heneicosane (C21) | 13.010 | 1344009 | 10.516 ug/ml |
| 13) T | n-Docosane (C22) | 13.595 | 1321567 | 10.468 ug/ml |
| 14) T | n-Tetracosane (C24) | 14.695 | 1302068 | 10.456 ug/ml |
| 15) T | n-Hexacosane (C26) | 15.714 | 1273525 | 10.447 ug/ml |
| 16) T | n-Octacosane (C28) | 16.661 | 1247372 | 10.476 ug/ml |
| 17) T | n-Tricontane (C30) | 17.547 | 1280217 | 10.668 ug/ml |
| 18) T | n-Dotriacontane (C32) | 18.378 | 1224121 | 10.592 ug/ml |
| 19) T | n-Tetratriacontane (C34) | 19.160 | 1138846 | 10.573 ug/ml |
| 20) T | n-Hexatriacontane (C36) | 19.898 | 1016654 | 10.583 ug/ml |
| 21) T | n-Octatriacontane (C38) | 20.611 | 943380 | 10.458 ug/ml |
| 22) T | n-Tetracontane (C40) | 21.461 | 910849 | 10.510 ug/ml |

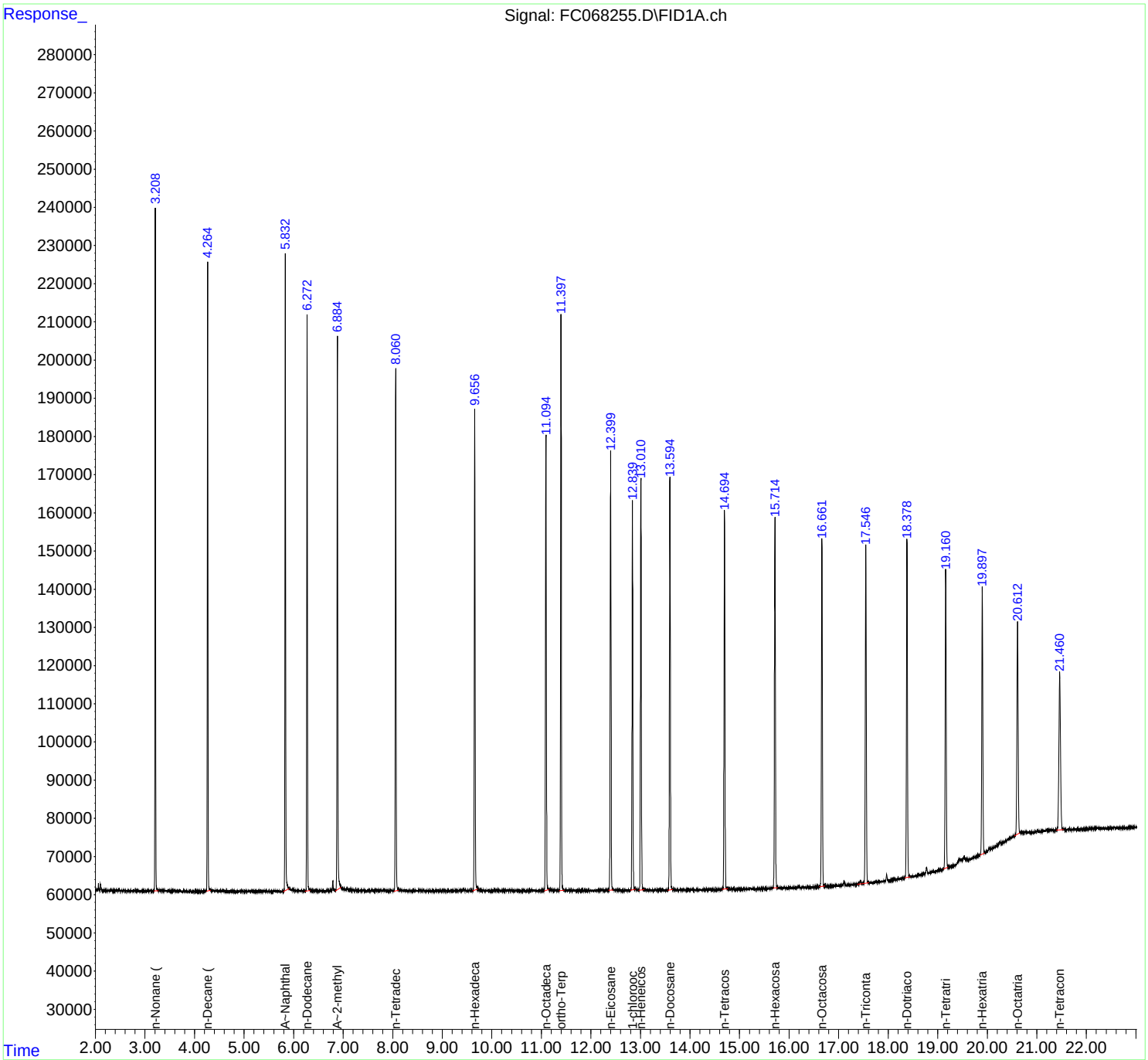
(f)=RT Delta > 1/2 Window (m)=manual int.

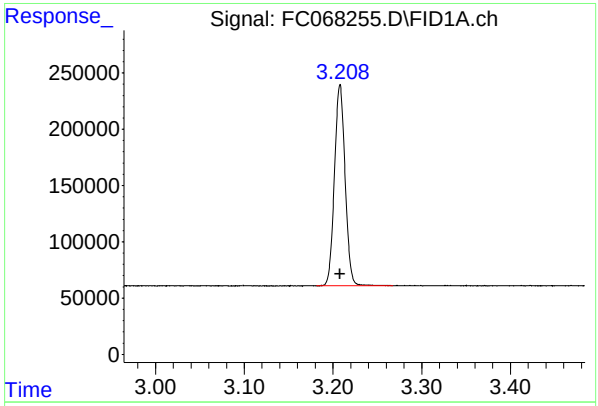
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC021125AL\
Data File : FC068255.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2025 18:14
Operator : YP/AJ
Sample : 10 PPM ALIPHATIC HC STD4
Misc :
ALS Vial : 18 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
10 PPM ALIPHATIC HC STD4

Integration File: autoint1.e
Quant Time: Feb 11 02:30:29 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Tue Feb 11 02:29:33 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

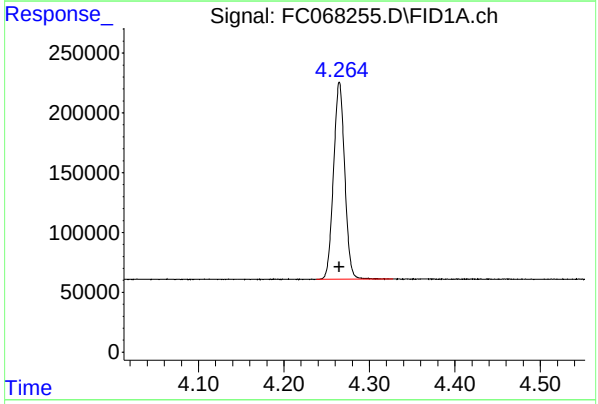





#1 n-Nonane (C9)

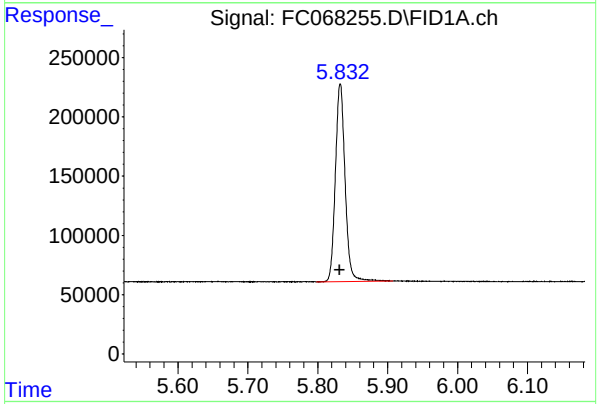
R.T.: 3.208 min
Delta R.T.: 0.000 min
Response: 1490390
Conc: 10.52 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
10 PPM ALIPHATIC HC STD4



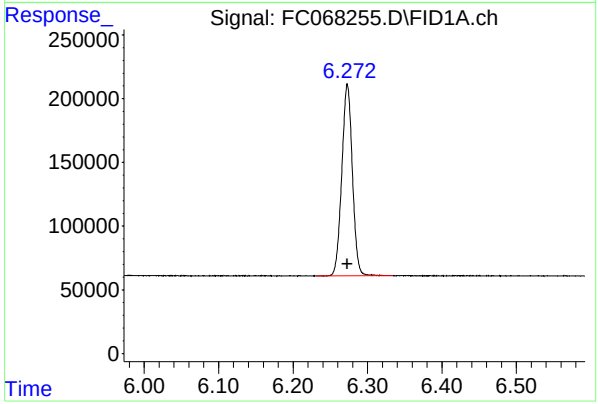

#2 n-Decane (C10)

R.T.: 4.265 min
Delta R.T.: 0.000 min
Response: 1497516
Conc: 10.50 ug/ml



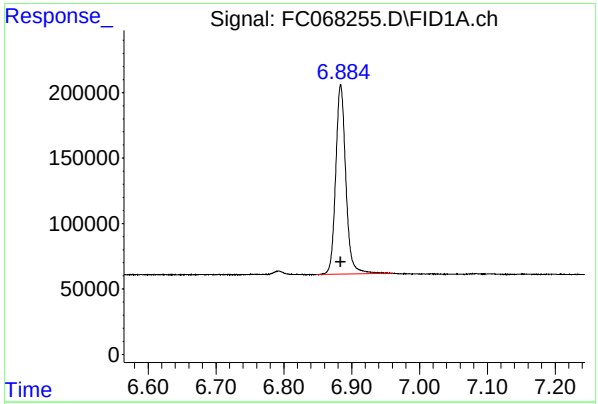

#3 A~Naphthalene (C11.7)

R.T.: 5.832 min
Delta R.T.: 0.000 min
Response: 1604467
Conc: 10.37 ug/ml




#4 n-Dodecane (C12)

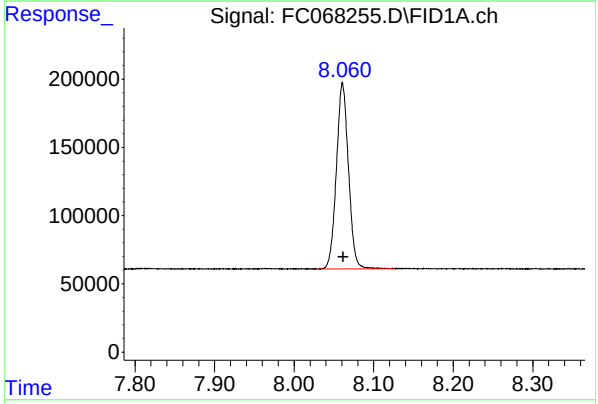
R.T.: 6.273 min
Delta R.T.: 0.000 min
Response: 1486768
Conc: 10.53 ug/ml




#5 A~2-methylnaphthalene (C12.89)

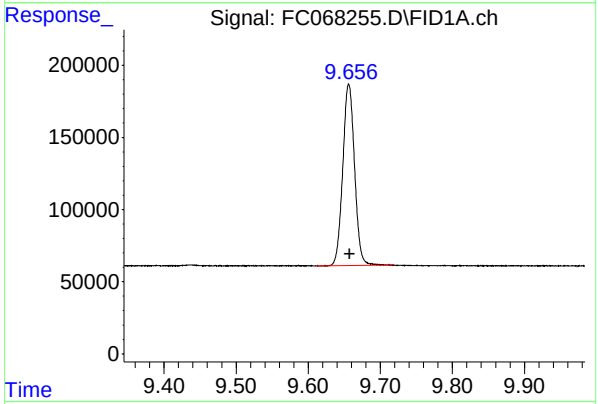
R.T.: 6.884 min
Delta R.T.: 0.000 min
Response: 1503396
Conc: 10.25 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
10 PPM ALIPHATIC HC STD4



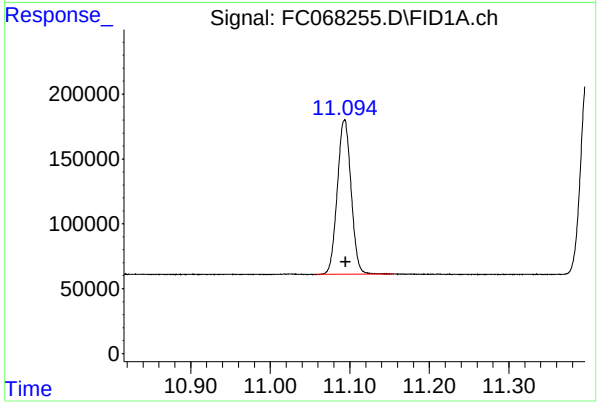

#6 n-Tetradecane (C14)

R.T.: 8.061 min
Delta R.T.: 0.000 min
Response: 1434684
Conc: 10.53 ug/ml



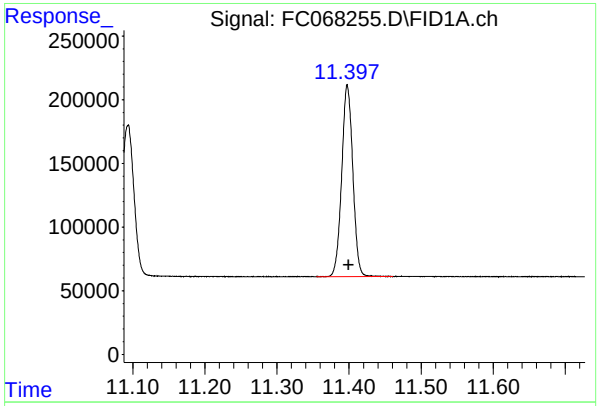

#7 n-Hexadecane (C16)

R.T.: 9.656 min
Delta R.T.: 0.000 min
Response: 1432035
Conc: 10.43 ug/ml




#8 n-Octadecane (C18)

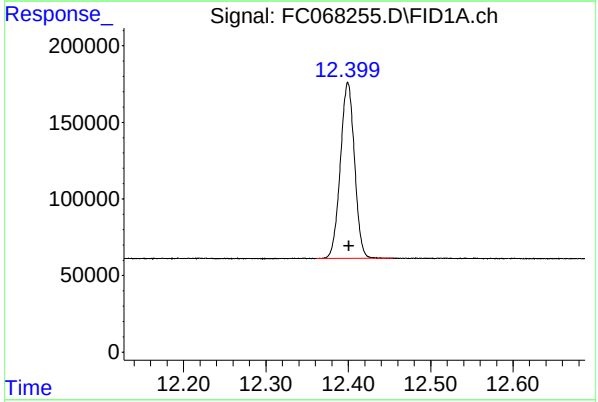
R.T.: 11.093 min
Delta R.T.: -0.001 min
Response: 1433269
Conc: 10.46 ug/ml




#9 ortho-Terphenyl (SURR)

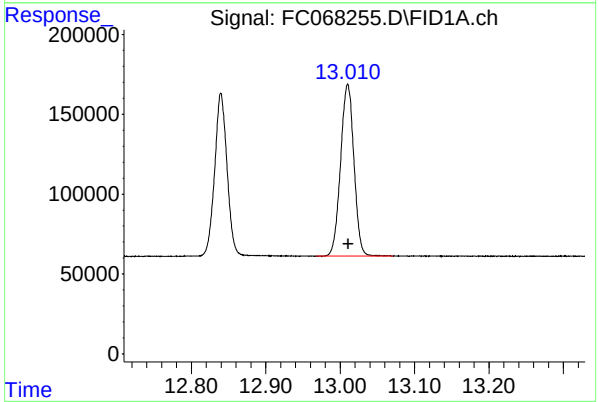
R.T.: 11.398 min
Delta R.T.: -0.002 min
Response: 1614436
Conc: 10.52 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
10 PPM ALIPHATIC HC STD4



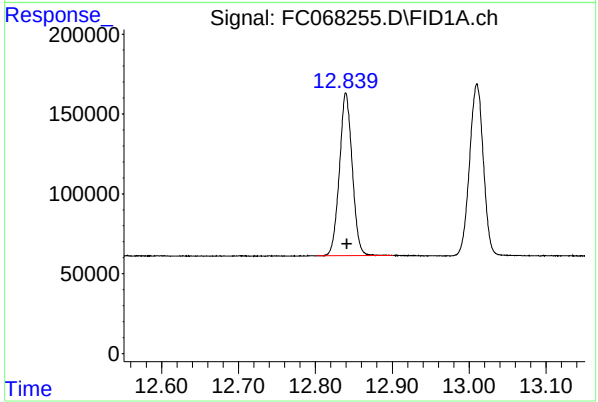

#10 n-Eicosane (C20)

R.T.: 12.400 min
Delta R.T.: -0.001 min
Response: 1367303
Conc: 10.47 ug/ml



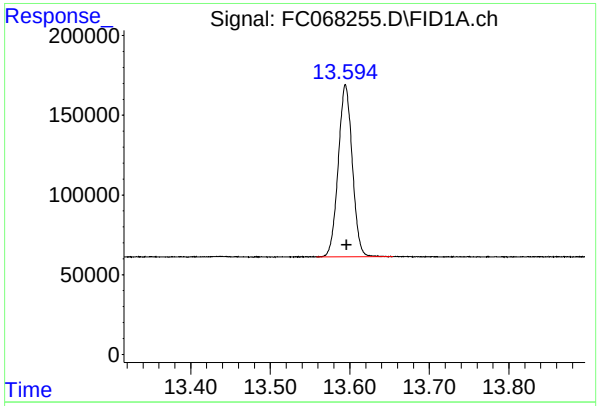

#11 n-Heneicosane (C21)

R.T.: 13.010 min
Delta R.T.: 0.000 min
Response: 1344009
Conc: 10.52 ug/ml




#12 1-chlorooctadecane (SURR)

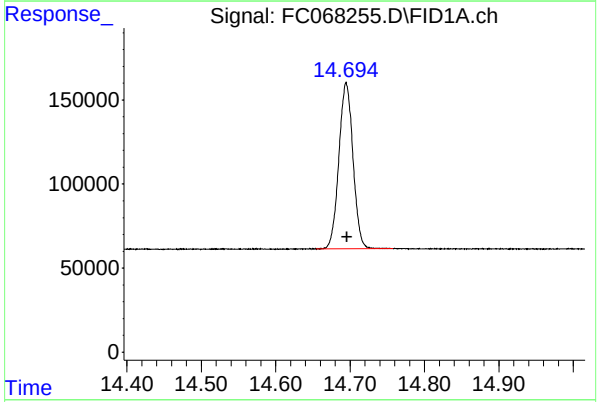
R.T.: 12.840 min
Delta R.T.: -0.002 min
Response: 1174811
Conc: 10.40 ug/ml




#13 n-Docosane (C22)

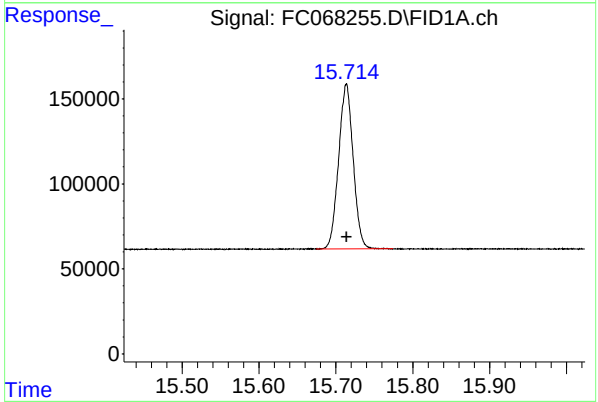
R.T.: 13.595 min
Delta R.T.: -0.001 min
Response: 1321567
Conc: 10.47 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
10 PPM ALIPHATIC HC STD4



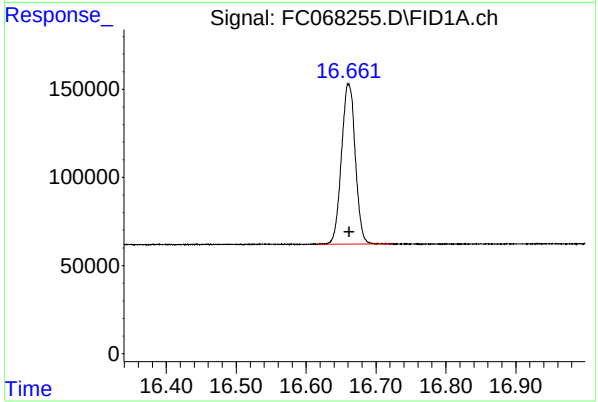

#14 n-Tetracosane (C24)

R.T.: 14.695 min
Delta R.T.: -0.001 min
Response: 1302068
Conc: 10.46 ug/ml



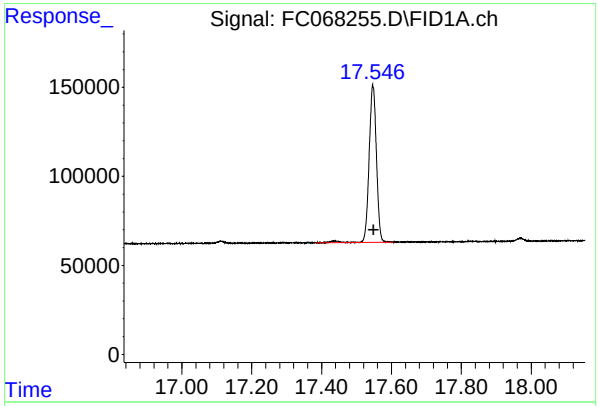

#15 n-Hexacosane (C26)

R.T.: 15.714 min
Delta R.T.: 0.000 min
Response: 1273525
Conc: 10.45 ug/ml




#16 n-Octacosane (C28)

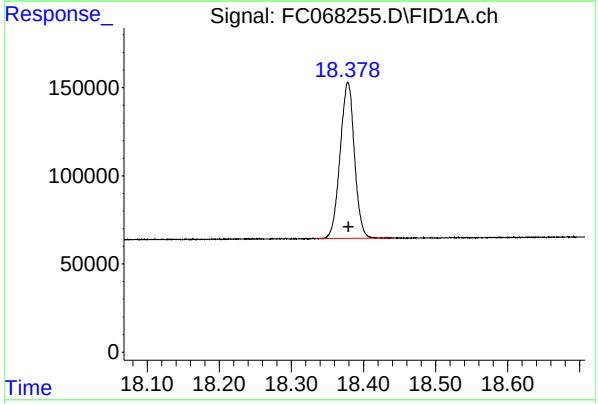
R.T.: 16.661 min
Delta R.T.: -0.001 min
Response: 1247372
Conc: 10.48 ug/ml




#17 n-Tricontane (C30)

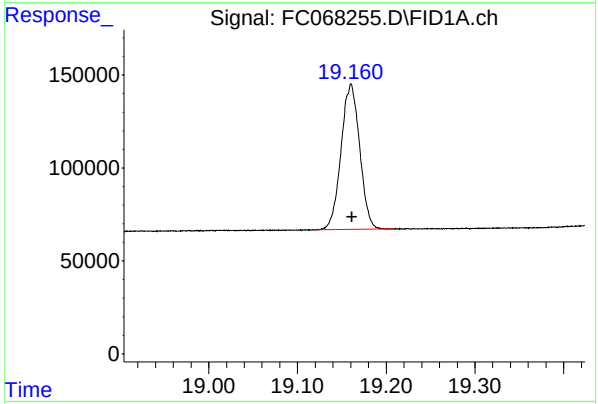
R.T.: 17.547 min
Delta R.T.: -0.002 min
Response: 1280217
Conc: 10.67 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
10 PPM ALIPHATIC HC STD4



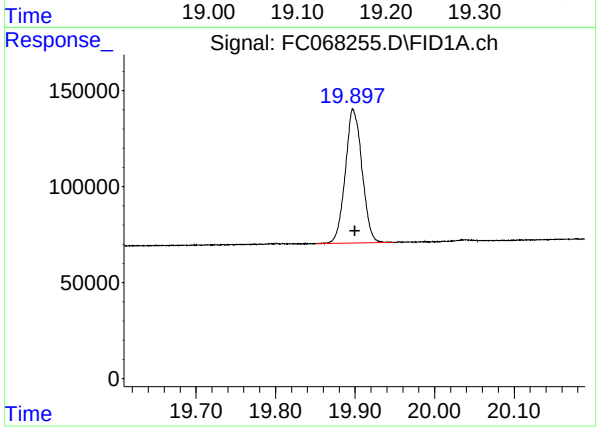

#18 n-Dotriacontane (C32)

R.T.: 18.378 min
Delta R.T.: -0.001 min
Response: 1224121
Conc: 10.59 ug/ml



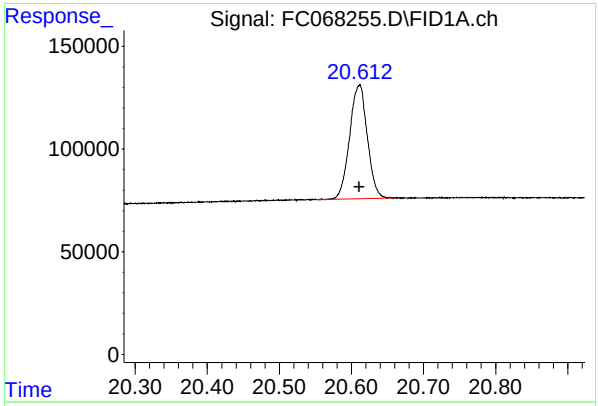

#19 n-Tetratriacontane (C34)

R.T.: 19.160 min
Delta R.T.: -0.001 min
Response: 1138846
Conc: 10.57 ug/ml




#20 n-Hexatriacontane (C36)

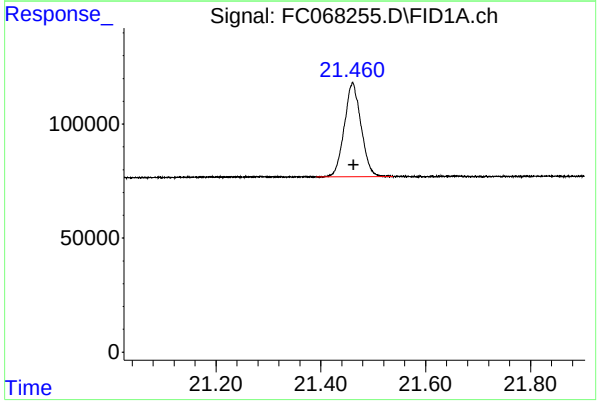
R.T.: 19.898 min
Delta R.T.: -0.002 min
Response: 1016654
Conc: 10.58 ug/ml




#21 n-Octatriacontane (C38)

R.T.: 20.611 min
Delta R.T.: 0.000 mi
Response: 943380
Conc: 10.46 ug/m

**Instrument :**
FID_C
**ClientSampleId :**
10 PPM ALIPHATIC HC STD4




#22 n-Tetracontane (C40)

R.T.: 21.461 min
Delta R.T.: -0.002 min
Response: 910849
Conc: 10.51 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC021125AL\
Data File : FC068255.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2025 18:14
Sample : 10 PPM ALIPHATIC HC STD4
Misc :
ALS Vial : 18 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Title : GC Extractables

Signal : FID1A.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 3.208 | 3.181 | 3.268 | BB | 177887 | 1490390 | 92.32% | 5.132% |
| 2 | 4.265 | 4.238 | 4.328 | BB | 163966 | 1497516 | 92.76% | 5.156% |
| 3 | 5.832 | 5.798 | 5.908 | BB | 166500 | 1604467 | 99.38% | 5.525% |
| 4 | 6.273 | 6.231 | 6.334 | BB | 149363 | 1486768 | 92.09% | 5.119% |
| 5 | 6.884 | 6.848 | 6.961 | BB | 144374 | 1503396 | 93.12% | 5.177% |
| 6 | 8.061 | 8.028 | 8.124 | BB | 135629 | 1434684 | 88.87% | 4.940% |
| 7 | 9.656 | 9.611 | 9.718 | BB | 125467 | 1432035 | 88.70% | 4.931% |
| 8 | 11.093 | 11.058 | 11.154 | BB | 119437 | 1433269 | 88.78% | 4.935% |
| 9 | 11.398 | 11.354 | 11.461 | BB | 150022 | 1614436 | 100.00% | 5.559% |
| 10 | 12.400 | 12.361 | 12.454 | BB | 114828 | 1367303 | 84.69% | 4.708% |
| 11 | 12.840 | 12.801 | 12.901 | BB | 100668 | 1174811 | 72.77% | 4.045% |
| 12 | 13.010 | 12.968 | 13.071 | BB | 107522 | 1344009 | 83.25% | 4.628% |
| 13 | 13.595 | 13.558 | 13.654 | BB | 107806 | 1321567 | 81.86% | 4.551% |
| 14 | 14.695 | 14.654 | 14.758 | BB | 98638 | 1302068 | 80.65% | 4.483% |
| 15 | 15.714 | 15.674 | 15.774 | BB | 97396 | 1273525 | 78.88% | 4.385% |
| 16 | 16.661 | 16.614 | 16.724 | BB | 90943 | 1247372 | 77.26% | 4.295% |
| 17 | 17.547 | 17.384 | 17.604 | BB | 87801 | 1280217 | 79.30% | 4.408% |
| 18 | 18.378 | 18.334 | 18.441 | BB | 88680 | 1224121 | 75.82% | 4.215% |
| 19 | 19.160 | 19.121 | 19.208 | BB | 78237 | 1138846 | 70.54% | 3.921% |
| 20 | 19.898 | 19.851 | 19.948 | BB | 69453 | 1016654 | 62.97% | 3.501% |
| 21 | 20.611 | 20.551 | 20.658 | BB | 55376 | 943380 | 58.43% | 3.248% |
| 22 | 21.461 | 21.391 | 21.538 | BB | 41390 | 910849 | 56.42% | 3.136% |
| | | | Sum of corrected areas: | | | 29041681 | | |

Aliphatic EPH 021125.M Tue Feb 11 02:40:05 2025

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

| | | | |
|---|---|---|---|
| Lab Sample ID: | 5 PPM ALIPHATIC HC S | Acq On: | 10 Feb 2025 18:50 |
| Client Sample ID: | | Operator: | YP/AJ |
| Data file: | FC068256.D | Misc: | |
| Instrument: | FID_C | ALS Vial: | 19 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | Units |
|---|---|---|---|---|---|
| Aliphatic C9-C12 | 3.107 | 6.373 | 2221877.000 | 15.000 | ug/ml |
| Aliphatic C12-C16 | 6.374 | 9.756 | 1444048.000 | 10.000 | ug/ml |
| Aliphatic C16-C21 | 9.757 | 13.110 | 2112599.000 | 15.000 | ug/ml |
| Aliphatic C21-C28 | 13.111 | 16.762 | 2635031.000 | 20.000 | ug/ml |
| Aliphatic C28-C40 | 16.763 | 21.563 | 3350978.000 | 30.000 | ug/ml |
| Aliphatic EPH | 3.107 | | 11764533.000 | 90.000 | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC021125AL\
Data File : FC068256.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2025 18:50
Operator : YP/AJ
Sample : 5 PPM ALIPHATIC HC STD5
Misc :
ALS Vial : 19 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
5 PPM ALIPHATIC HC STD5

Integration File: autoint1.e
Quant Time: Feb 11 02:30:38 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Tue Feb 11 02:29:33 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

| | Compound | R.T. | Response | Conc Units |
|---|---|---|---|---|
| | **System Monitoring Compounds** | | | |
| 9) S | ortho-Terphenyl (SURR) | 11.397 | 824094 | 5.368 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 10.74% |
| 12) S | 1-chlorooctadecane (S... | 12.840 | 593786 | 5.257 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 10.51% |
| | **Target Compounds** | | | |
| 1) T | n-Nonane (C9) | 3.208 | 739660 | 5.221 ug/ml |
| 2) T | n-Decane (C10) | 4.265 | 741867 | 5.200 ug/ml |
| 3) T | A~Naphthalene (C11.7) | 5.833 | 779725 | 5.039 ug/ml |
| 4) T | n-Dodecane (C12) | 6.273 | 740350 | 5.242 ug/ml |
| 5) T | A~2-methylnaphthalene... | 6.884 | 729676 | 4.976 ug/ml |
| 6) T | n-Tetradecane (C14) | 8.060 | 721115 | 5.290 ug/ml |
| 7) T | n-Hexadecane (C16) | 9.655 | 722933 | 5.266 ug/ml |
| 8) T | n-Octadecane (C18) | 11.093 | 728153 | 5.314 ug/ml |
| 10) T | n-Eicosane (C20) | 12.398 | 697130 | 5.340 ug/ml |
| 11) T | n-Heneicosane (C21) | 13.009 | 687316 | 5.378 ug/ml |
| 13) T | n-Docosane (C22) | 13.594 | 674382 | 5.342 ug/ml |
| 14) T | n-Tetracosane (C24) | 14.694 | 667971 | 5.364 ug/ml |
| 15) T | n-Hexacosane (C26) | 15.713 | 652733 | 5.355 ug/ml |
| 16) T | n-Octacosane (C28) | 16.660 | 639945 | 5.374 ug/ml |
| 17) T | n-Tricontane (C30) | 17.547 | 654656 | 5.455 ug/ml |
| 18) T | n-Dotriacontane (C32) | 18.378 | 639981 | 5.537 ug/ml |
| 19) T | n-Tetratriacontane (C34) | 19.160 | 592586 | 5.502 ug/ml |
| 20) T | n-Hexatriacontane (C36) | 19.899 | 518944 | 5.402 ug/ml |
| 21) T | n-Octatriacontane (C38) | 20.609 | 485383 | 5.381 ug/ml |
| 22) T | n-Tetracontane (C40) | 21.462 | 459428 | 5.301 ug/ml |

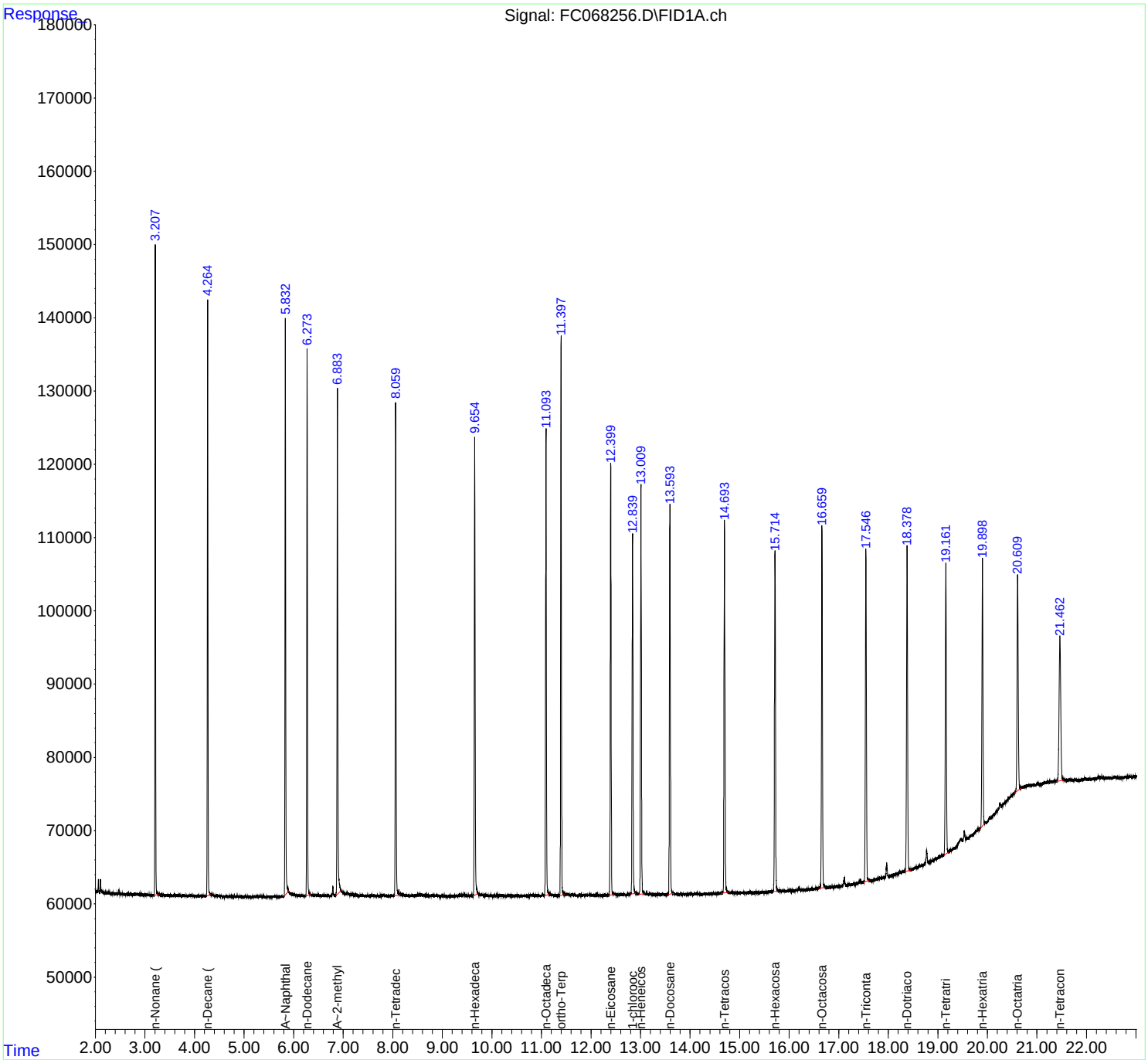
(f)=RT Delta > 1/2 Window (m)=manual int.

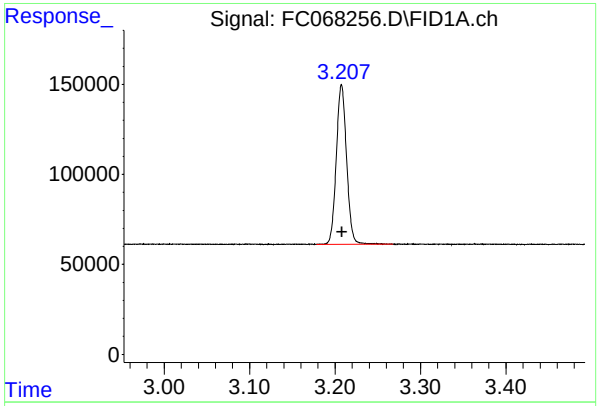
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC021125AL\
Data File : FC068256.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2025 18:50
Operator : YP/AJ
Sample : 5 PPM ALIPHATIC HC STD5
Misc :
ALS Vial : 19 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
5 PPM ALIPHATIC HC STD5

Integration File: autoint1.e
Quant Time: Feb 11 02:30:38 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Tue Feb 11 02:29:33 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

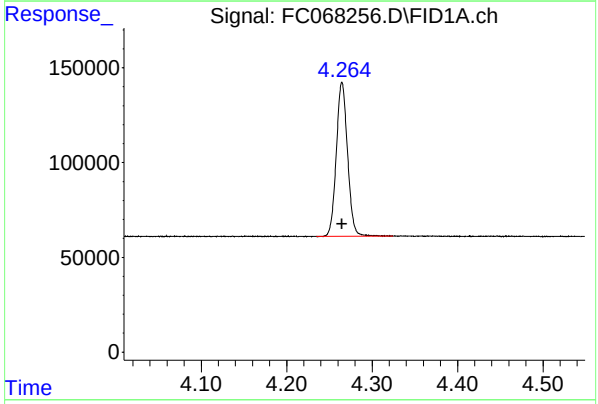





#1 n-Nonane (C9)

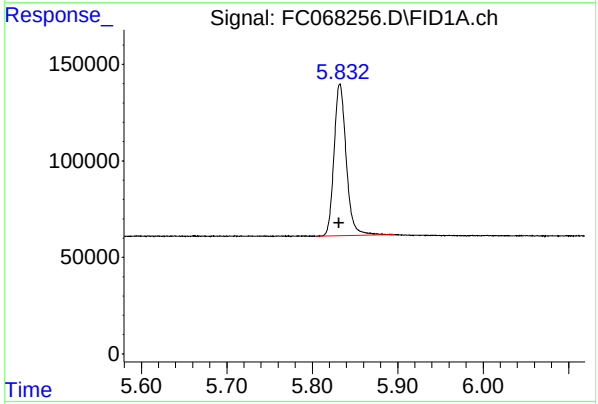
R.T.: 3.208 min
Delta R.T.: 0.000 min
Response: 739660
Conc: 5.22 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
5 PPM ALIPHATIC HC STD5



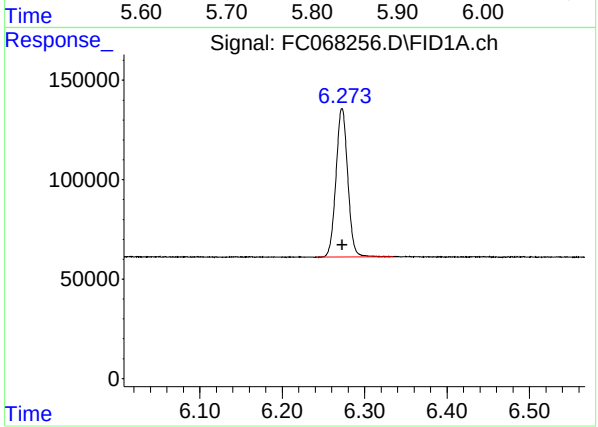

#2 n-Decane (C10)

R.T.: 4.265 min
Delta R.T.: 0.000 min
Response: 741867
Conc: 5.20 ug/ml



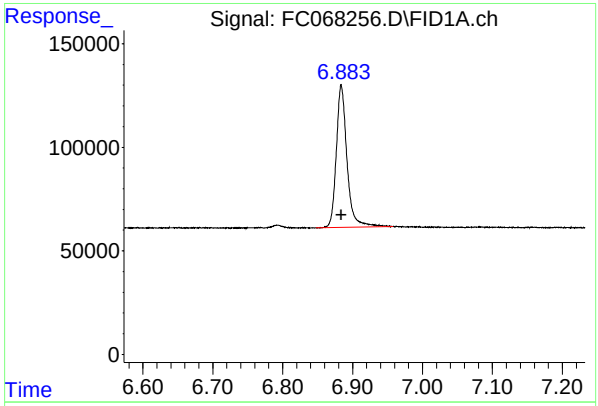

#3 A~Naphthalene (C11.7)

R.T.: 5.833 min
Delta R.T.: 0.001 min
Response: 779725
Conc: 5.04 ug/ml




#4 n-Dodecane (C12)

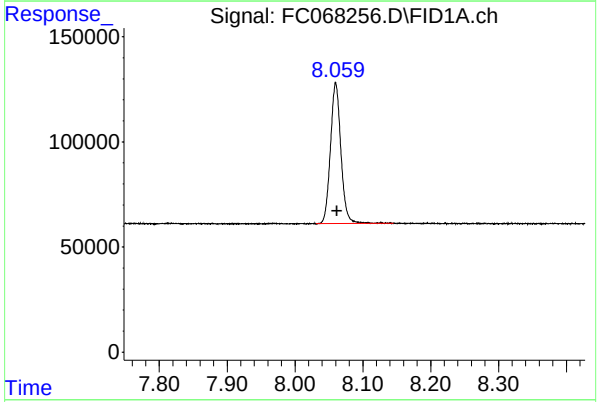
R.T.: 6.273 min
Delta R.T.: 0.000 min
Response: 740350
Conc: 5.24 ug/ml




#5 A~2-methylnaphthalene (C12.89)

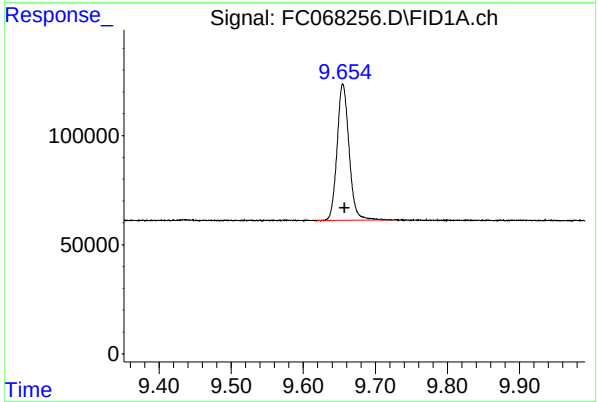
R.T.: 6.884 min
Delta R.T.: 0.000 min
Response: 729676
Conc: 4.98 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
5 PPM ALIPHATIC HC STD5



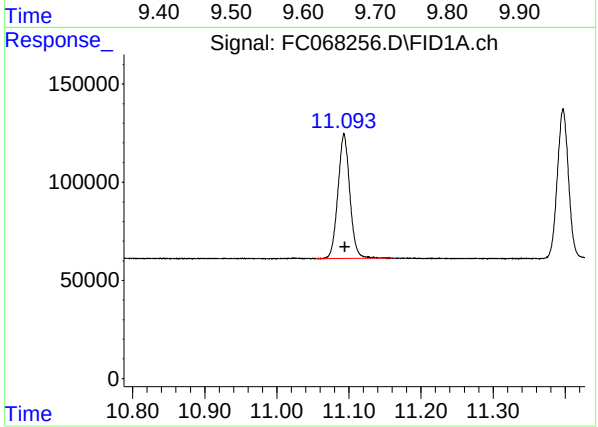

#6 n-Tetradecane (C14)

R.T.: 8.060 min
Delta R.T.: -0.002 min
Response: 721115
Conc: 5.29 ug/ml



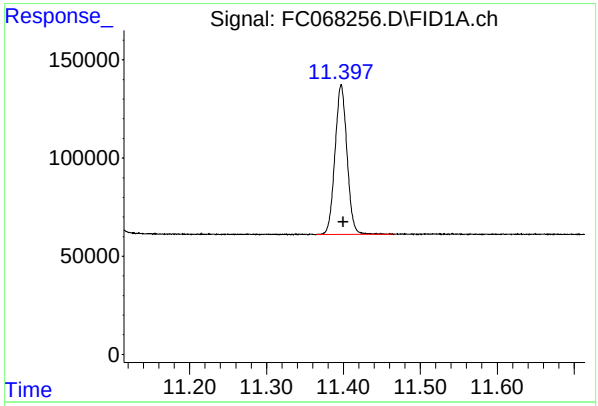

#7 n-Hexadecane (C16)

R.T.: 9.655 min
Delta R.T.: -0.002 min
Response: 722933
Conc: 5.27 ug/ml




#8 n-Octadecane (C18)

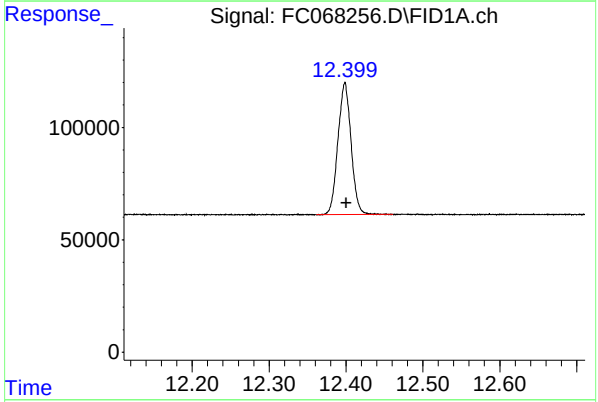
R.T.: 11.093 min
Delta R.T.: -0.001 min
Response: 728153
Conc: 5.31 ug/ml




#9 ortho-Terphenyl (SURR)

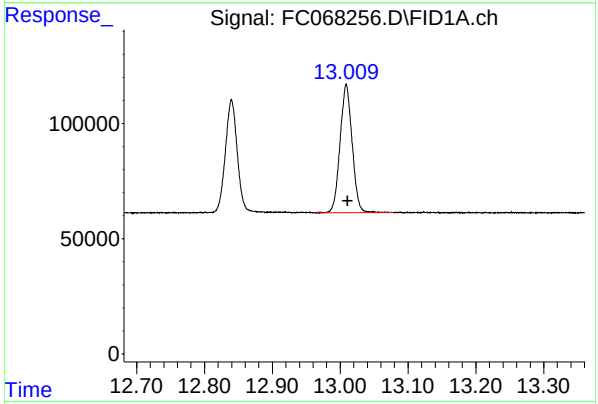
R.T.: 11.397 min
Delta R.T.: -0.003 min
Response: 824094
Conc: 5.37 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
5 PPM ALIPHATIC HC STD5



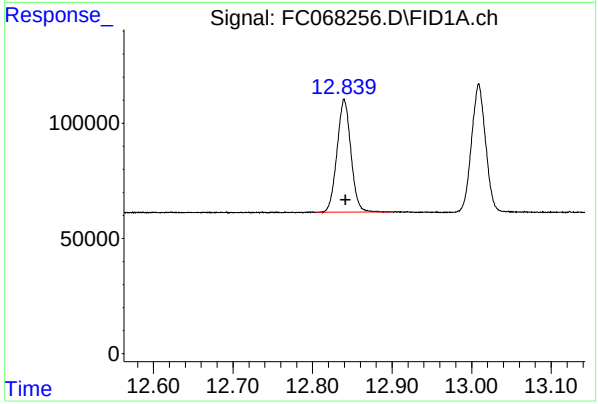

#10 n-Eicosane (C20)

R.T.: 12.398 min
Delta R.T.: -0.002 min
Response: 697130
Conc: 5.34 ug/ml



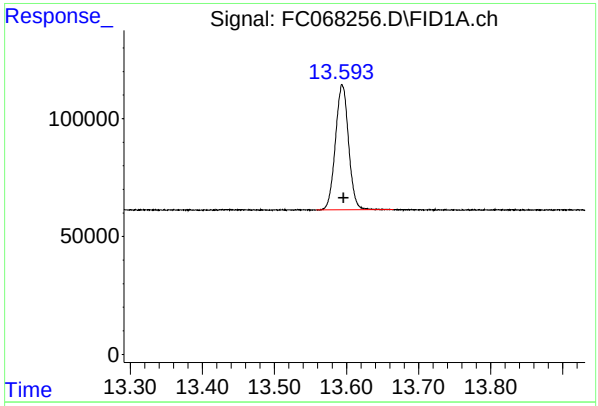

#11 n-Heneicosane (C21)

R.T.: 13.009 min
Delta R.T.: -0.002 min
Response: 687316
Conc: 5.38 ug/ml




#12 1-chlorooctadecane (SURR)

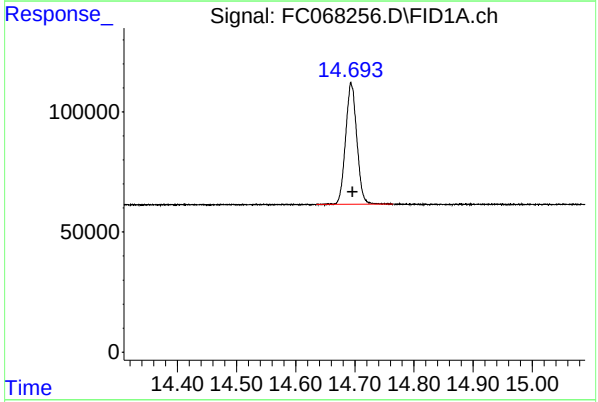
R.T.: 12.840 min
Delta R.T.: -0.002 min
Response: 593786
Conc: 5.26 ug/ml




#13 n-Docosane (C22)

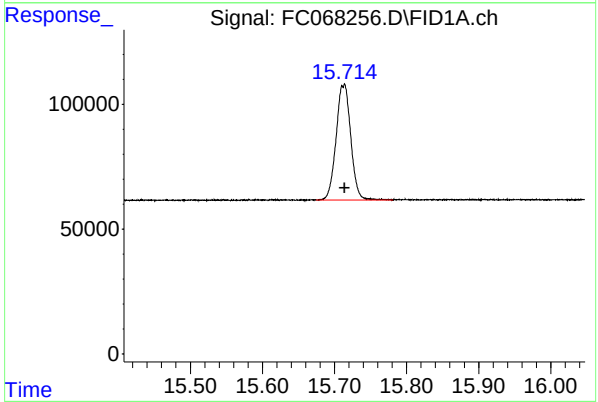
R.T.: 13.594 min
Delta R.T.: -0.002 min
Response: 674382
Conc: 5.34 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
5 PPM ALIPHATIC HC STD5



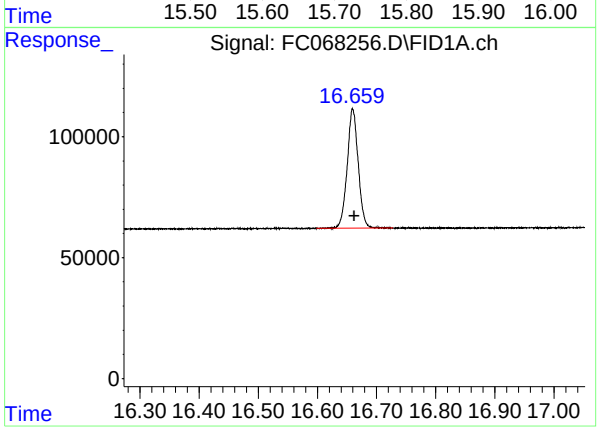

#14 n-Tetracosane (C24)

R.T.: 14.694 min
Delta R.T.: -0.002 min
Response: 667971
Conc: 5.36 ug/ml



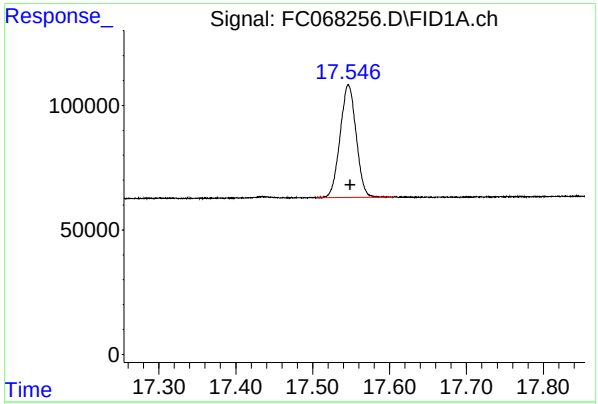

#15 n-Hexacosane (C26)

R.T.: 15.713 min
Delta R.T.: -0.001 min
Response: 652733
Conc: 5.35 ug/ml




#16 n-Octacosane (C28)

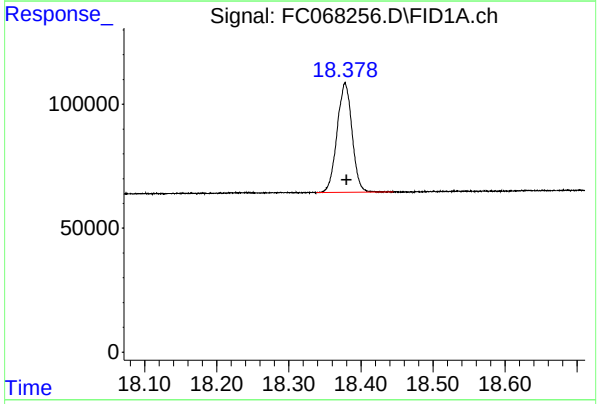
R.T.: 16.660 min
Delta R.T.: -0.002 min
Response: 639945
Conc: 5.37 ug/ml




#17 n-Tricontane (C30)

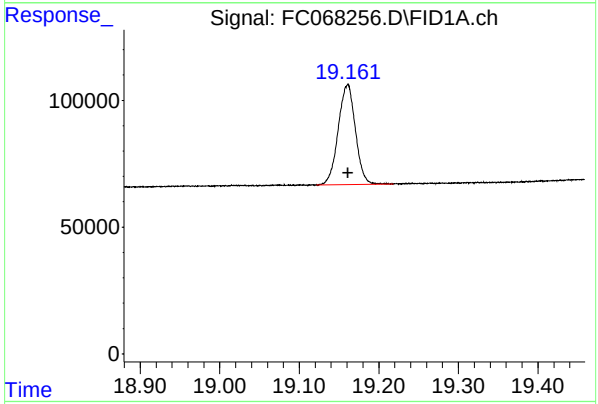
R.T.: 17.547 min
Delta R.T.: -0.002 min
Response: 654656
Conc: 5.46 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
5 PPM ALIPHATIC HC STD5



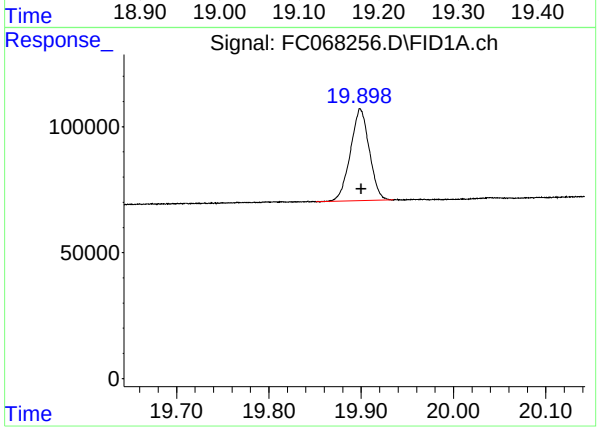

#18 n-Dotriacontane (C32)

R.T.: 18.378 min
Delta R.T.: -0.002 min
Response: 639981
Conc: 5.54 ug/ml



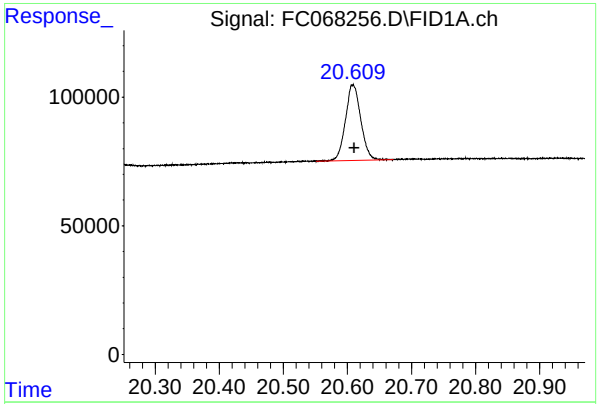

#19 n-Tetratriacontane (C34)

R.T.: 19.160 min
Delta R.T.: 0.000 min
Response: 592586
Conc: 5.50 ug/ml




#20 n-Hexatriacontane (C36)

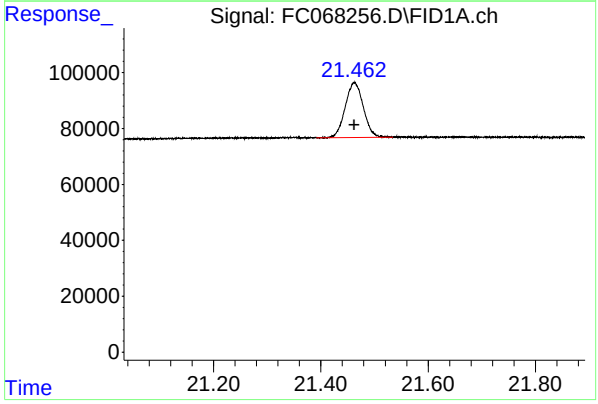
R.T.: 19.899 min
Delta R.T.: 0.000 min
Response: 518944
Conc: 5.40 ug/ml




#21 n-Octatriacontane (C38)

R.T.: 20.609 min
Delta R.T.: -0.002 min
Response: 485383
Conc: 5.38 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
5 PPM ALIPHATIC HC STD5




#22 n-Tetracontane (C40)

R.T.: 21.462 min
Delta R.T.: 0.000 min
Response: 459428
Conc: 5.30 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC021125AL\
Data File : FC068256.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2025 18:50
Sample : 5 PPM ALIPHATIC HC STD5
Misc :
ALS Vial : 19 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Title : GC Extractables

Signal : FID1A.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 3.208 | 3.178 | 3.268 | BB | 88225 | 739660 | 89.75% | 5.035% |
| 2 | 4.265 | 4.234 | 4.324 | BB | 81016 | 741867 | 90.02% | 5.050% |
| 3 | 5.833 | 5.804 | 5.894 | BB | 78603 | 779725 | 94.62% | 5.307% |
| 4 | 6.273 | 6.241 | 6.334 | BB | 74589 | 740350 | 89.84% | 5.039% |
| 5 | 6.884 | 6.848 | 6.958 | BB | 68142 | 729676 | 88.54% | 4.967% |
| 6 | 8.060 | 8.031 | 8.144 | BB | 66668 | 721115 | 87.50% | 4.908% |
| 7 | 9.655 | 9.618 | 9.724 | BB | 62427 | 722933 | 87.72% | 4.921% |
| 8 | 11.093 | 11.054 | 11.161 | BB | 62811 | 728153 | 88.36% | 4.956% |
| 9 | 11.397 | 11.364 | 11.464 | BB | 75900 | 824094 | 100.00% | 5.609% |
| 10 | 12.398 | 12.361 | 12.461 | BB | 58302 | 697130 | 84.59% | 4.745% |
| 11 | 12.840 | 12.804 | 12.901 | BB | 48610 | 593786 | 72.05% | 4.042% |
| 12 | 13.009 | 12.964 | 13.078 | BB | 55281 | 687316 | 83.40% | 4.678% |
| 13 | 13.594 | 13.558 | 13.664 | BB | 53078 | 674382 | 81.83% | 4.590% |
| 14 | 14.694 | 14.634 | 14.764 | BB | 50164 | 667971 | 81.06% | 4.547% |
| 15 | 15.713 | 15.674 | 15.781 | BB | 46241 | 652733 | 79.21% | 4.443% |
| 16 | 16.660 | 16.598 | 16.728 | BB | 48962 | 639945 | 77.65% | 4.356% |
| 17 | 17.547 | 17.504 | 17.604 | BB | 44994 | 654656 | 79.44% | 4.456% |
| 18 | 18.378 | 18.338 | 18.444 | BB | 44176 | 639981 | 77.66% | 4.356% |
| 19 | 19.160 | 19.121 | 19.218 | BB | 39586 | 592586 | 71.91% | 4.033% |
| 20 | 19.899 | 19.851 | 19.934 | BB | 36345 | 518944 | 62.97% | 3.532% |
| 21 | 20.609 | 20.551 | 20.671 | BB | 29349 | 485383 | 58.90% | 3.304% |
| 22 | 21.462 | 21.391 | 21.534 | BB | 19678 | 459428 | 55.75% | 3.127% |
| | | | Sum of corrected areas: | | | 14691811 | | |

Aliphatic EPH 021125.M Tue Feb 11 02:40:20 2025

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

# Quantitation Report For Aliphatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | 20 PPM ALIPHATIC HC S' | Acq On: | 10 Feb 2025 19:26 |
| Client Sample ID: | 20 PPM ALIPHATIC HC S' | Operator: | YP/AJ |
| Data file: | FC068257.D | Misc: | |
| Instrument: | FID_C | ALS Vial: | 20 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aliphatic C9-C12 | 3.107 | 6.373 | 11335983 | 80.377 | 300 | ug/ml |
| Aliphatic C12-C16 | 6.374 | 9.756 | 8213202 | 60.102 | 200 | ug/ml |
| Aliphatic C16-C21 | 9.757 | 13.110 | 7719624 | 58.646 | 300 | ug/ml |
| Aliphatic C21-C28 | 13.111 | 16.762 | 9669480 | 78.811 | 400 | ug/ml |
| Aliphatic C28-C40 | 16.763 | 21.563 | 12147282 | 118.111 | 600 | ug/ml |
| Aliphatic EPH | 3.107 | 21.563 | 49085571 | 396.047 | | ug/ml |
| ortho-Terphenyl (SURR) | 11.399 | 11.399 | 3006153 | 19.59 | | ug/ml |
| 1-chlorooctadecane (SURR) | 12.841 | 12.841 | 2210712 | 19.66 | | ug/ml |
| Aliphatic C9-C28 | 3.107 | 16.762 | 36938289 | 277.936 | 1200 | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC021125AL\
Data File : FC068257.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2025 19:26
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD ICV
Misc :
ALS Vial : 20 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD ICV

Integration File: autoint1.e
Quant Time: Feb 11 02:33:34 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Tue Feb 11 02:29:33 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

| | Compound | R.T. | Response | Conc Units |
|---|---|---|---|---|
| | **System Monitoring Compounds** | | | |
| 9) S | ortho-Terphenyl (SURR) | 11.399 | 3006153 | 19.591 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 39.18% |
| 12) S | 1-chlorooctadecane (S... | 12.841 | 2210712 | 19.655 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 39.31% |
| | **Target Compounds** | | | |
| 1) T | n-Nonane (C9) | 3.207 | 2763389 | 19.644 ug/ml |
| 2) T | n-Decane (C10) | 4.265 | 2787474 | 19.676 ug/ml |
| 3) T | A~Naphthalene (C11.7) | 5.832 | 3022645 | 19.751 ug/ml |
| 4) T | n-Dodecane (C12) | 6.274 | 2762475 | 19.626 ug/ml |
| 5) T | A~2-methylnaphthalene... | 6.884 | 2871264 | 19.825 ug/ml |
| 6) T | n-Tetradecane (C14) | 8.061 | 2665240 | 19.548 ug/ml |
| 7) T | n-Hexadecane (C16) | 9.657 | 2676698 | 19.543 ug/ml |
| 8) T | n-Octadecane (C18) | 11.095 | 2671678 | 19.536 ug/ml |
| 10) T | n-Eicosane (C20) | 12.401 | 2547036 | 19.549 ug/ml |
| 11) T | n-Heneicosane (C21) | 13.011 | 2500910 | 19.562 ug/ml |
| 13) T | n-Docosane (C22) | 13.595 | 2472408 | 19.618 ug/ml |
| 14) T | n-Tetracosane (C24) | 14.696 | 2447601 | 19.679 ug/ml |
| 15) T | n-Hexacosane (C26) | 15.714 | 2396918 | 19.713 ug/ml |
| 16) T | n-Octacosane (C28) | 16.662 | 2352553 | 19.808 ug/ml |
| 17) T | n-Tricontane (C30) | 17.548 | 2368324 | 19.676 ug/ml |
| 18) T | n-Dotriacontane (C32) | 18.379 | 2282342 | 19.664 ug/ml |
| 19) T | n-Tetratriacontane (C34) | 19.160 | 2121381 | 19.632 ug/ml |
| 20) T | n-Hexatriacontane (C36) | 19.898 | 1897153 | 19.727 ug/ml |
| 21) T | n-Octatriacontane (C38) | 20.609 | 1768616 | 19.674 ug/ml |
| 22) T | n-Tetracontane (C40) | 21.462 | 1709466 | 19.758 ug/ml |

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

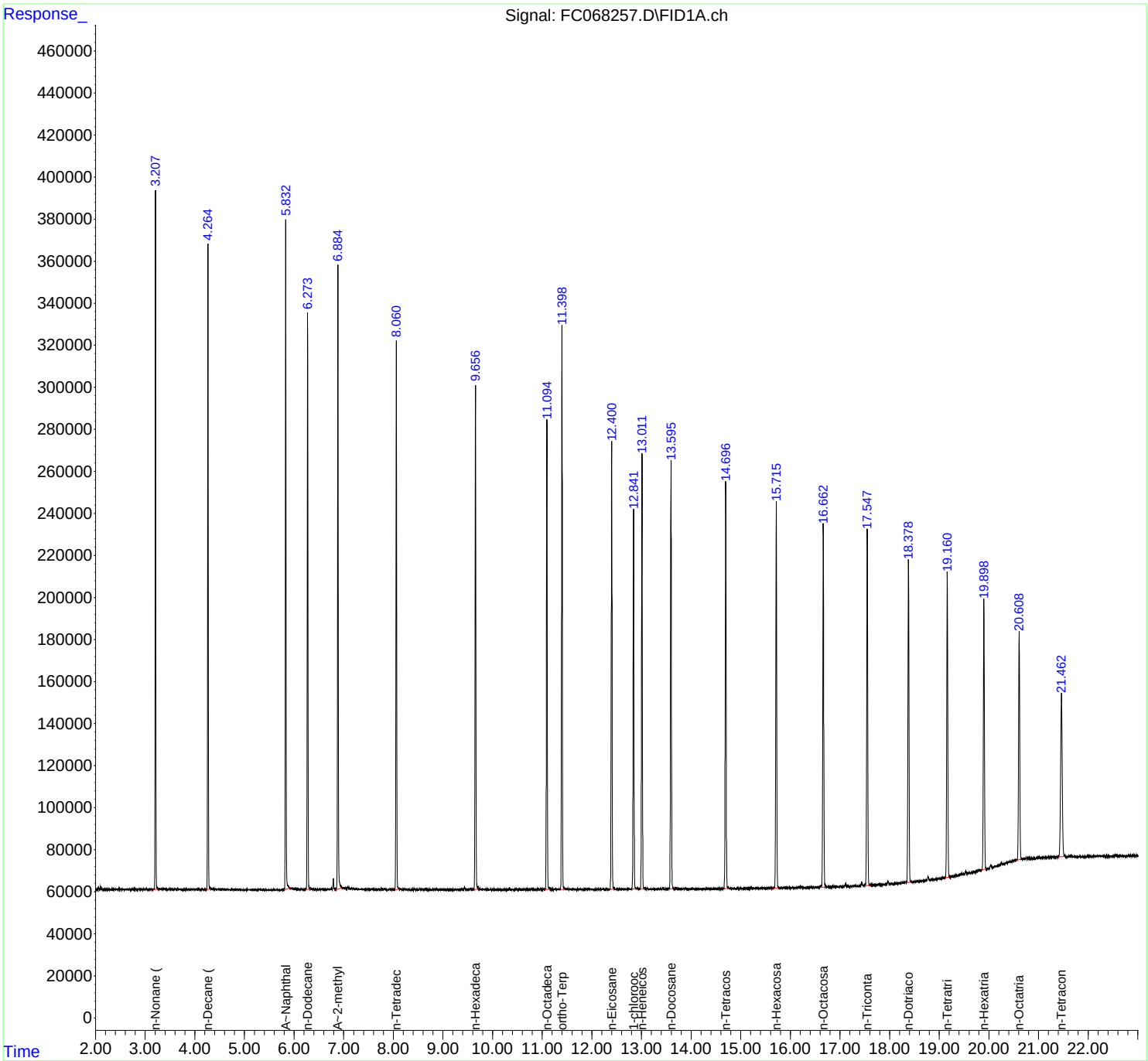
Quantitation Report (QT Reviewed)

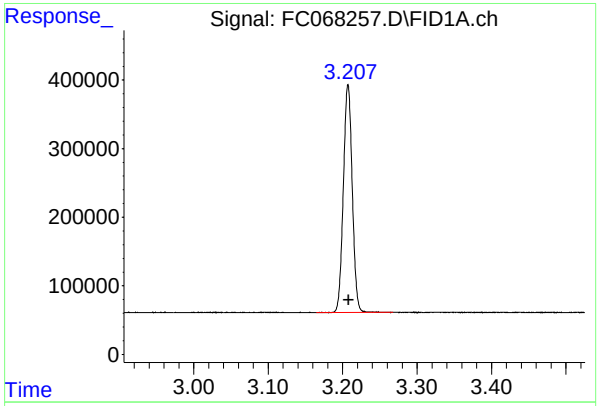
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC021125AL\
Data File : FC068257.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2025 19:26
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD ICV
Misc :
ALS Vial : 20 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD ICV

Integration File: autoint1.e
Quant Time: Feb 11 02:33:34 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Tue Feb 11 02:29:33 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

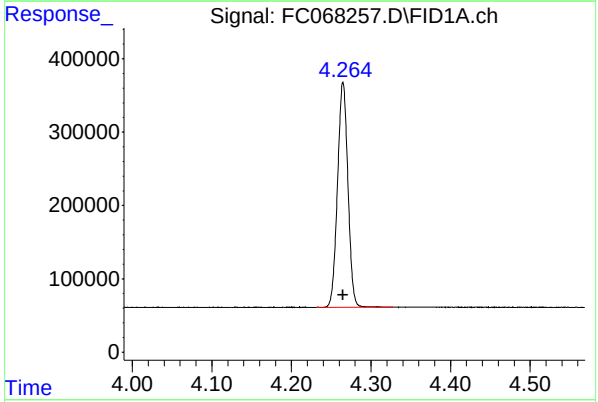





#1 n-Nonane (C9)

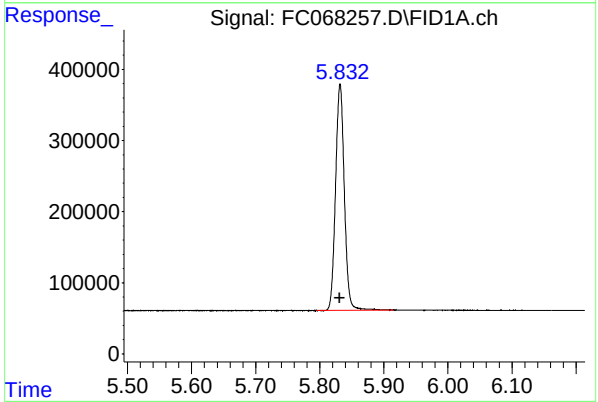
R.T.: 3.207 min
Delta R.T.: 0.000 min
Response: 2763389
Conc: 19.64 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD ICV



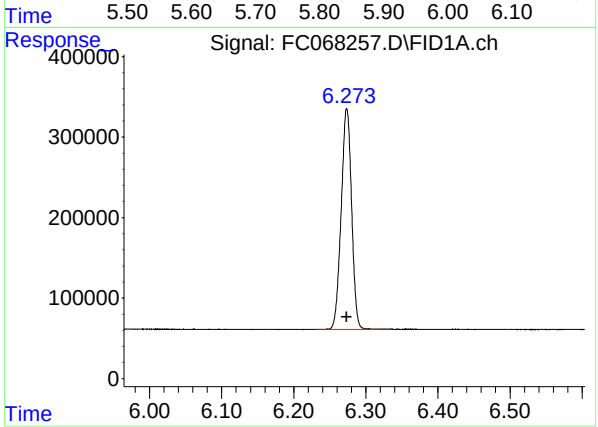

#2 n-Decane (C10)

R.T.: 4.265 min
Delta R.T.: 0.000 min
Response: 2787474
Conc: 19.68 ug/ml



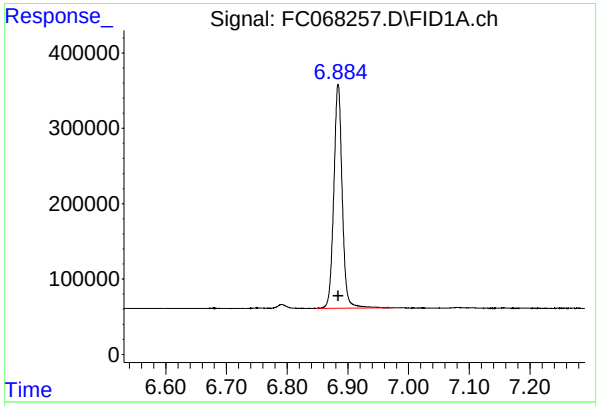

#3 A~Naphthalene (C11.7)

R.T.: 5.832 min
Delta R.T.: 0.000 min
Response: 3022645
Conc: 19.75 ug/ml




#4 n-Dodecane (C12)

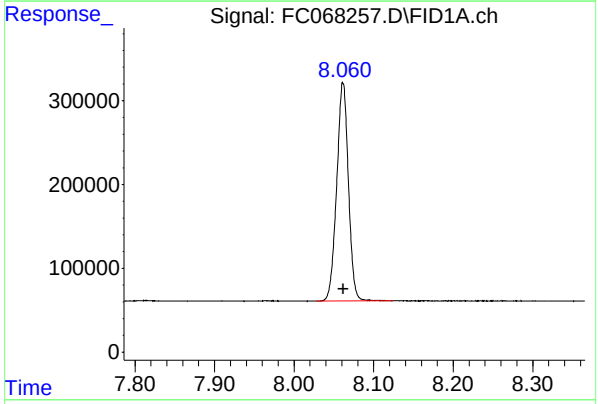
R.T.: 6.274 min
Delta R.T.: 0.000 min
Response: 2762475
Conc: 19.63 ug/ml




#5 A~2-methylnaphthalene (C12.89)

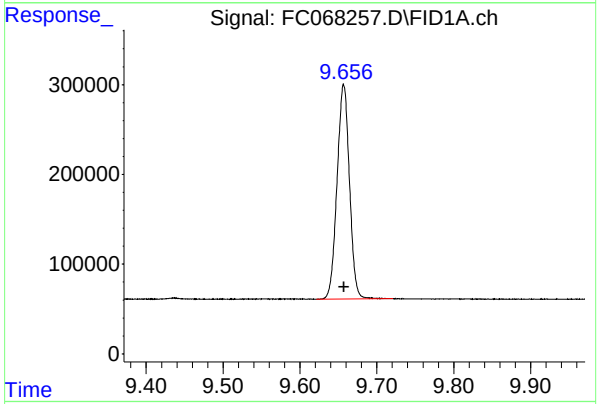
R.T.: 6.884 min
Delta R.T.: 0.000 min
Response: 2871264
Conc: 19.83 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD ICV



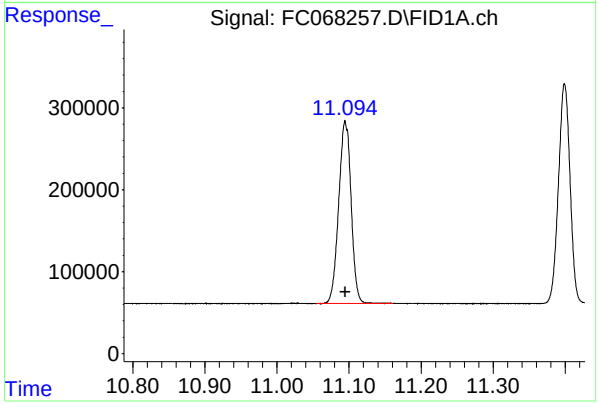

#6 n-Tetradecane (C14)

R.T.: 8.061 min
Delta R.T.: 0.000 min
Response: 2665240
Conc: 19.55 ug/ml



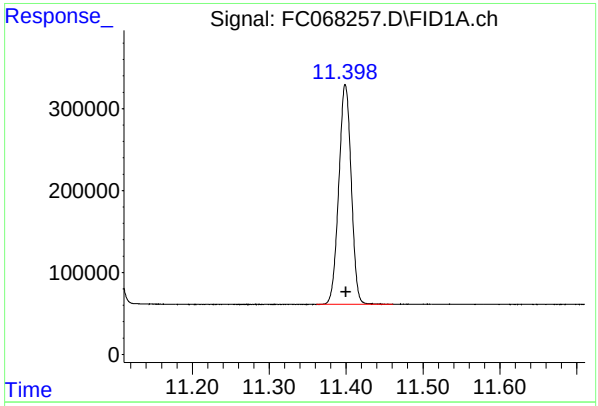

#7 n-Hexadecane (C16)

R.T.: 9.657 min
Delta R.T.: 0.000 min
Response: 2676698
Conc: 19.54 ug/ml




#8 n-Octadecane (C18)

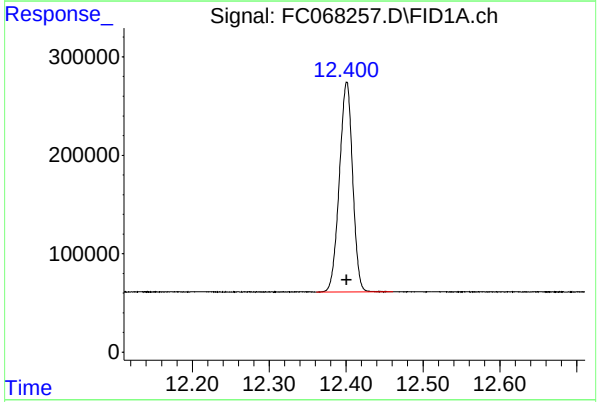
R.T.: 11.095 min
Delta R.T.: 0.000 min
Response: 2671678
Conc: 19.54 ug/ml




#9 ortho-Terphenyl (SURR)

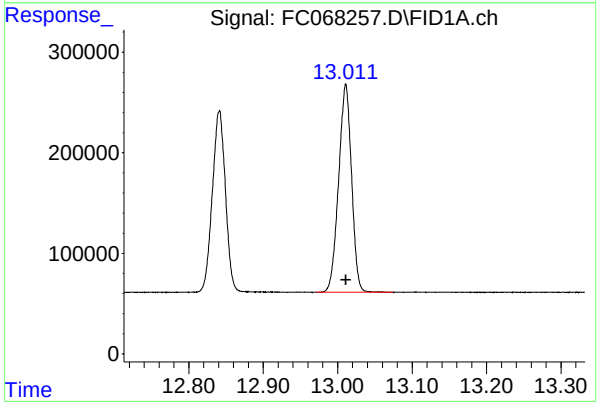
R.T.: 11.399 min
Delta R.T.: 0.000 min
Response: 3006153
Conc: 19.59 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD ICV



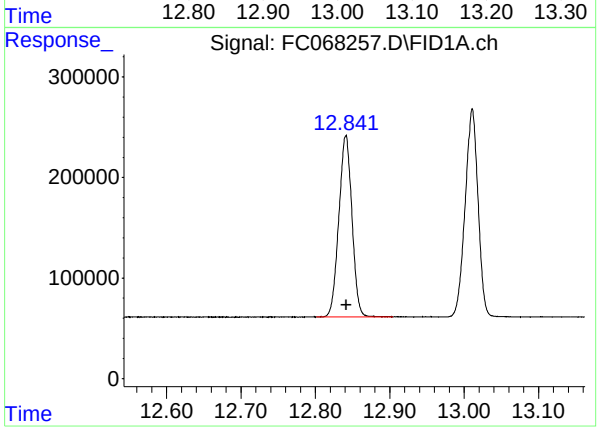

#10 n-Eicosane (C20)

R.T.: 12.401 min
Delta R.T.: 0.000 min
Response: 2547036
Conc: 19.55 ug/ml



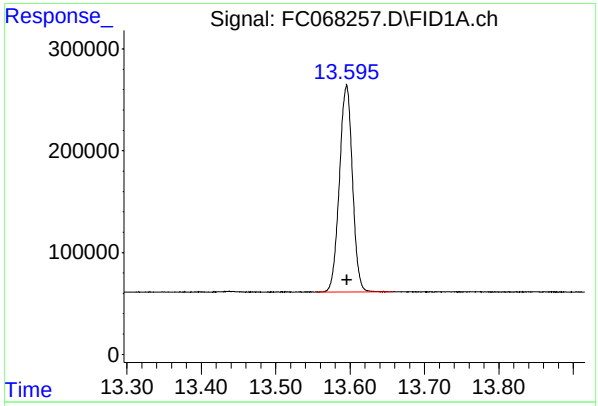

#11 n-Heneicosane (C21)

R.T.: 13.011 min
Delta R.T.: 0.000 min
Response: 2500910
Conc: 19.56 ug/ml




#12 1-chlorooctadecane (SURR)

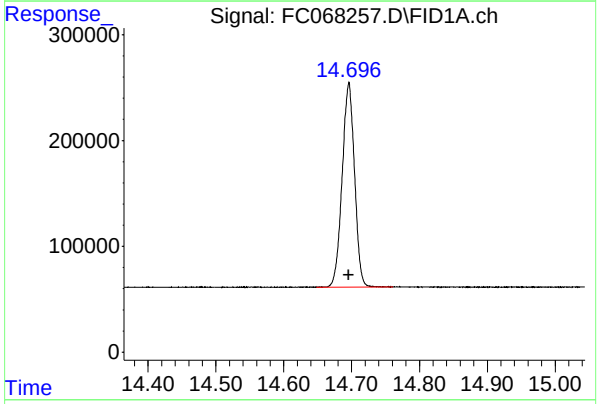
R.T.: 12.841 min
Delta R.T.: 0.000 min
Response: 2210712
Conc: 19.66 ug/ml




#13 n-Docosane (C22)

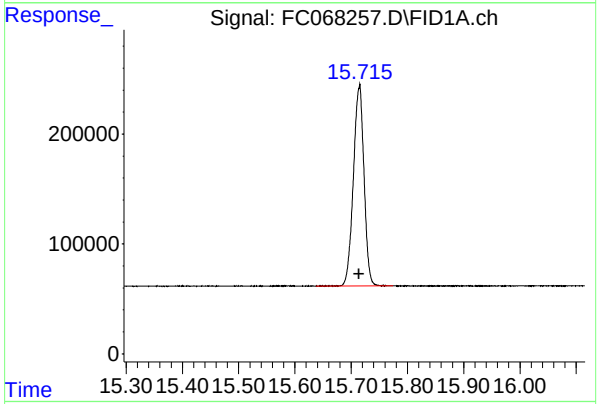
R.T.: 13.595 min
Delta R.T.: 0.000 min
Response: 2472408
Conc: 19.62 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD ICV



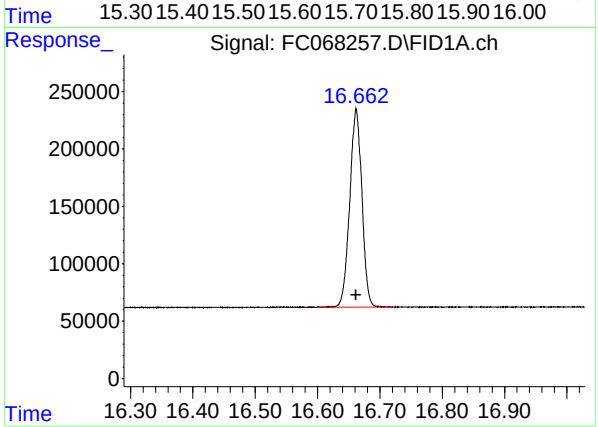

#14 n-Tetracosane (C24)

R.T.: 14.696 min
Delta R.T.: 0.000 min
Response: 2447601
Conc: 19.68 ug/ml



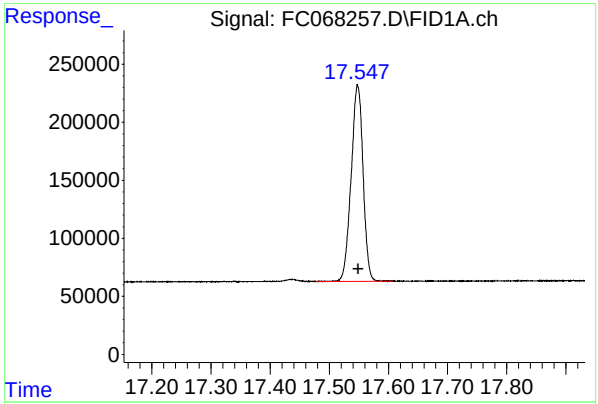

#15 n-Hexacosane (C26)

R.T.: 15.714 min
Delta R.T.: 0.000 min
Response: 2396918
Conc: 19.71 ug/ml




#16 n-Octacosane (C28)

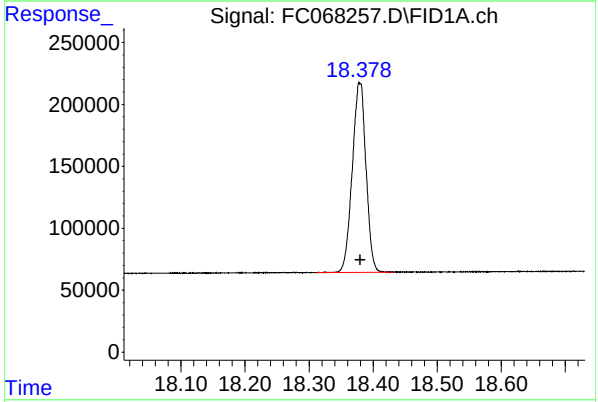
R.T.: 16.662 min
Delta R.T.: 0.000 min
Response: 2352553
Conc: 19.81 ug/ml




#17 n-Tricontane (C30)

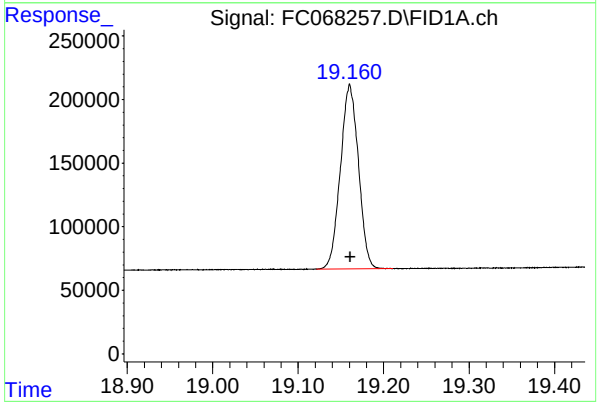
R.T.: 17.548 min
Delta R.T.: -0.001 min
Response: 2368324
Conc: 19.68 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD ICV



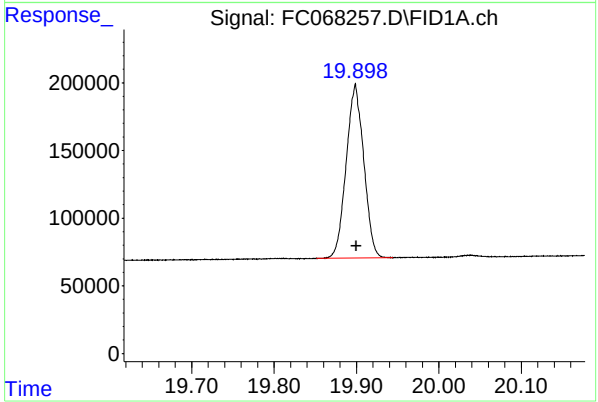

#18 n-Dotriacontane (C32)

R.T.: 18.379 min
Delta R.T.: 0.000 min
Response: 2282342
Conc: 19.66 ug/ml



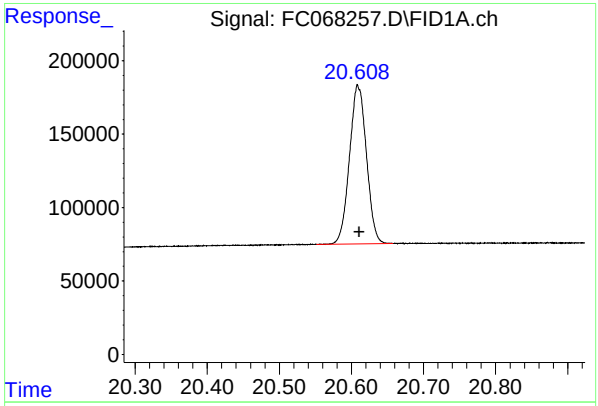

#19 n-Tetratriacontane (C34)

R.T.: 19.160 min
Delta R.T.: 0.000 min
Response: 2121381
Conc: 19.63 ug/ml




#20 n-Hexatriacontane (C36)

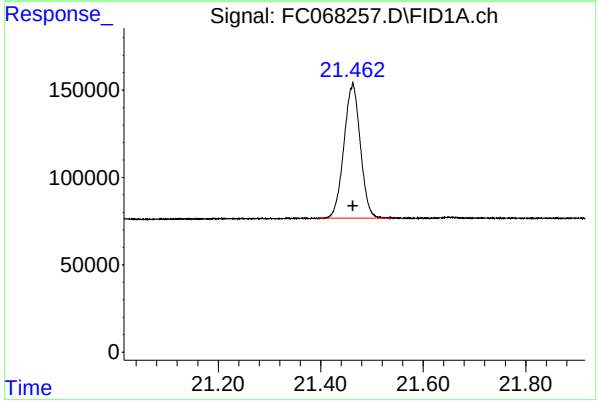
R.T.: 19.898 min
Delta R.T.: -0.002 min
Response: 1897153
Conc: 19.73 ug/ml




#21 n-Octatriacontane (C38)

R.T.: 20.609 min
Delta R.T.: -0.002 mi
Response: 1768616
Conc: 19.67 ug/m

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD ICV




#22 n-Tetracontane (C40)

R.T.: 21.462 min
Delta R.T.: 0.000 min
Response: 1709466
Conc: 19.76 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC021125AL\
Data File : FC068257.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2025 19:26
Sample : 20 PPM ALIPHATIC HC STD ICV
Misc :
ALS Vial : 20 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Title : GC Extractables

Signal : FID1A.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 3.207 | 3.164 | 3.268 | BB | 332094 | 2763389 | 91.42% | 5.089% |
| 2 | 4.265 | 4.231 | 4.328 | BB | 306680 | 2787474 | 92.22% | 5.133% |
| 3 | 5.832 | 5.794 | 5.914 | BB | 316234 | 3022645 | 100.00% | 5.566% |
| 4 | 6.274 | 6.231 | 6.338 | BB | 274740 | 2762475 | 91.39% | 5.087% |
| 5 | 6.884 | 6.848 | 6.974 | BB | 297539 | 2871264 | 94.99% | 5.288% |
| 6 | 8.061 | 8.028 | 8.124 | BB | 260997 | 2665240 | 88.18% | 4.908% |
| 7 | 9.657 | 9.621 | 9.721 | BB | 239943 | 2676698 | 88.55% | 4.929% |
| 8 | 11.095 | 11.054 | 11.161 | BB | 222508 | 2671678 | 88.39% | 4.920% |
| 9 | 11.399 | 11.361 | 11.461 | BB | 268482 | 3006153 | 99.45% | 5.536% |
| 10 | 12.401 | 12.361 | 12.461 | BB | 214041 | 2547036 | 84.27% | 4.690% |
| 11 | 12.841 | 12.801 | 12.904 | BB | 180766 | 2210712 | 73.14% | 4.071% |
| 12 | 13.011 | 12.971 | 13.074 | BB | 207142 | 2500910 | 82.74% | 4.606% |
| 13 | 13.595 | 13.554 | 13.658 | BB | 201306 | 2472408 | 81.80% | 4.553% |
| 14 | 14.696 | 14.648 | 14.761 | BB | 189927 | 2447601 | 80.98% | 4.507% |
| 15 | 15.714 | 15.638 | 15.774 | BB | 182011 | 2396918 | 79.30% | 4.414% |
| 16 | 16.662 | 16.598 | 16.721 | BB | 171008 | 2352553 | 77.83% | 4.332% |
| 17 | 17.548 | 17.478 | 17.608 | BB | 168872 | 2368324 | 78.35% | 4.361% |
| 18 | 18.379 | 18.311 | 18.431 | BB | 154550 | 2282342 | 75.51% | 4.203% |
| 19 | 19.160 | 19.121 | 19.211 | BB | 143746 | 2121381 | 70.18% | 3.907% |
| 20 | 19.898 | 19.851 | 19.944 | BB | 125666 | 1897153 | 62.76% | 3.494% |
| 21 | 20.609 | 20.551 | 20.658 | BB | 106434 | 1768616 | 58.51% | 3.257% |
| 22 | 21.462 | 21.391 | 21.541 | BB | 75880 | 1709466 | 56.56% | 3.148% |
| | | | Sum of corrected areas: | | | 54302432 | | |

Aliphatic EPH 021125.M Tue Feb 11 02:40:39 2025

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

# Inital Calibration Report for SequenceID : FD021125AR

**AreaCount**

| Parameter Range | FD049072.D | FD049073.D | FD049074.D | FD049075.D | FD049076.D | |
|---|---|---|---|---|---|---|
| Aromatic C10-C12 | 30133782.000 | 15194817.000 | 6263156.000 | 3318077.000 | 1700032.000 | |
| Aromatic C12-C16 | 44977690.000 | 22823722.000 | 9507721.000 | 5041964.000 | 2641021.000 | |
| Aromatic C16-C21 | 58435647.000 | 29734390.000 | 12145436.000 | 6295751.000 | 3256475.000 | |
| Aromatic C21-C36 | 121981098.000 | 62220992.000 | 25499877.000 | 13225172.000 | 6892110.000 | |
| Aromatic EPH | 255528217.000 | 129973921.000 | 53416190.000 | 27880964.000 | 14489638.000 | |

**AVG Response Factor**

| Parameter Range | AVG RF | % RSD | | | | |
|---|---|---|---|---|---|---|
| Aromatic C10-C12 | 159020.606 | 5.389 | | | | |
| Aromatic C12-C16 | 160935.8659994 | 6.836 | | | | |
| Aromatic C16-C21 | 153359.3085 | 4.411 | | | | |
| Aromatic C21-C36 | 143114.7526664 | 4.923 | | | | |
| Aromatic EPH | 150128.8232216 | 5.194 | | | | |

**Concentration**

| Parameter Range | FD049072.D | FD049073.D | FD049074.D | FD049075.D | FD049076.D | |
|---|---|---|---|---|---|---|
| Aromatic C10-C12 | 200.000 | 100.000 | 40.000 | 20.000 | 10.000 | |
| Aromatic C12-C16 | 300.000 | 150.000 | 60.000 | 30.000 | 15.000 | |
| Aromatic C16-C21 | 400.000 | 200.000 | 80.000 | 40.000 | 20.000 | |
| Aromatic C21-C36 | 900.000 | 450.000 | 180.000 | 90.000 | 45.000 | |
| Aromatic EPH | 1800.000 | 900.000 | 360.000 | 180.000 | 90.000 | |

**Response Factor**

| Parameter Range | FD049072.D | FD049073.D | FD049074.D | FD049075.D | FD049076.D | |
|---|---|---|---|---|---|---|
| Aromatic C10-C12 | 150668.910000 | 151948.170000 | 156578.900000 | 165903.850000 | 170003.200000 | |
| Aromatic C12-C16 | 149925.633333 | 152158.146666 | 158462.016666 | 168065.466666 | 176068.066666 | |
| Aromatic C16-C21 | 146089.117500 | 148671.950000 | 151817.950000 | 157393.775000 | 162823.750000 | |
| Aromatic C21-C36 | 135534.553333 | 138268.871111 | 141665.983333 | 146946.355555 | 153158.000000 | |
| Aromatic EPH | 141960.120555 | 144415.467777 | 148378.305555 | 154894.244444 | 160995.977777 | |

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| | | | |
|---|---|---|---|
| Lab Sample ID: | 100 PPM AROMATIC HC | Acq On: | 10 Feb 2025 13:22 |
| Client Sample ID: | | Operator: | YP/AJ |
| Data file: | FD049072.D | Misc: | |
| Instrument: | FID_D | ALS Vial: | 62 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | Units |
|---|---|---|---|---|---|
| Aromatic C10-C12 | 4.075 | 5.793 | 30133782.000 | 200.000 | ug/ml |
| Aromatic C12-C16 | 5.794 | 8.396 | 44977690.000 | 300.000 | ug/ml |
| Aromatic C16-C21 | 8.397 | 12.658 | 58435647.000 | 400.000 | ug/ml |
| Aromatic C21-C36 | 12.659 | 18.067 | 121981098.000 | 900.000 | ug/ml |
| Aromatic EPH | 4.075 | 18.067 | 255528217.000 | 1800.000 | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD021125AR\
Data File : FD049072.D
Signal(s) : FID2B.ch
Acq On : 10 Feb 2025 13:22
Operator : YP/AJ
Sample : 100 PPM AROMATIC HC STD1
Misc :
ALS Vial : 62 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
100 PPM AROMATIC HC STD1

Integration File: autoint1.e
Quant Time: Feb 10 15:30:48 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Mon Feb 10 15:28:06 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

| | Compound | R.T. | Response | Conc Units |
|---|---|---|---|---|
| | **System Monitoring Compounds** | | | |
| 4) S | 2-Bromonaphthalene (S... | 7.356 | 13521753 | 97.612 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 195.22% |
| 6) S | 2-Flurobiphenyl (SURR) | 8.206 | 9031094 | 100.727 ug/ml |
| Spiked Amount | 50.000 Range | 0 - 131 | Recovery = | 201.45%# |
| 11) S | ortho-Terphenyl (SURR) | 11.242 | 14903579 | 96.771 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 193.54% |
| | **Target Compounds** | | | |
| 1) T | 1,2,3-Trimethylbenzen... | 4.179 | 14869075 | 97.560 ug/ml |
| 2) T | Naphthalene (C11.7) | 5.697 | 15264707 | 98.585 ug/ml |
| 3) T | 2-Methylnaphthalene (... | 6.744 | 14901306 | 97.974 ug/ml |
| 5) T | Acenaphthylene (C15.06) | 8.010 | 15174302 | 97.403 ug/ml |
| 7) T | Acenaphthene (C15.5) | 8.306 | 14902082 | 96.330 ug/ml |
| 8) T | Flouorene (C16.55) | 9.085 | 14990417 | 97.888 ug/ml |
| 9) T | Phenanthrene (C19.36) | 10.472 | 14561159 | 98.628 ug/ml |
| 10) T | Anthracene (C19.43) | 10.548 | 14369869 | 97.698 ug/ml |
| 12) T | Fluoranthene (C21.85) | 12.278 | 14577451 | 97.401 ug/ml |
| 13) T | Pyrene (C20.8) | 12.571 | 14514202 | 98.100 ug/ml |
| 14) T | Benzo[a]anthracene (C... | 14.441 | 13838427 | 101.145 ug/ml |
| 15) T | Chrysene (C27.41) | 14.487 | 14067276 | 95.042 ug/ml |
| 16) T | benzo[b]fluoranthene ... | 15.992 | 13742882 | 98.944 ug/ml |
| 17) T | Bnezo[k]fluoranthene ... | 16.030 | 13818927 | 96.450 ug/ml |
| 18) T | Benzo[a]pyrene (C31.34) | 16.370 | 13061093 | 98.611 ug/ml |
| 19) T | Indeno[1,2,3-cd]pyren... | 17.738 | 12478937 | 107.613 ug/ml |
| 20) T | Dibenz[a,h]anthracene... | 17.776 | 13100134 | 91.486 ug/ml |
| 21) T | Benzo[g,h,i]perylene ... | 17.995 | 13295971 | 96.863 ug/ml |

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

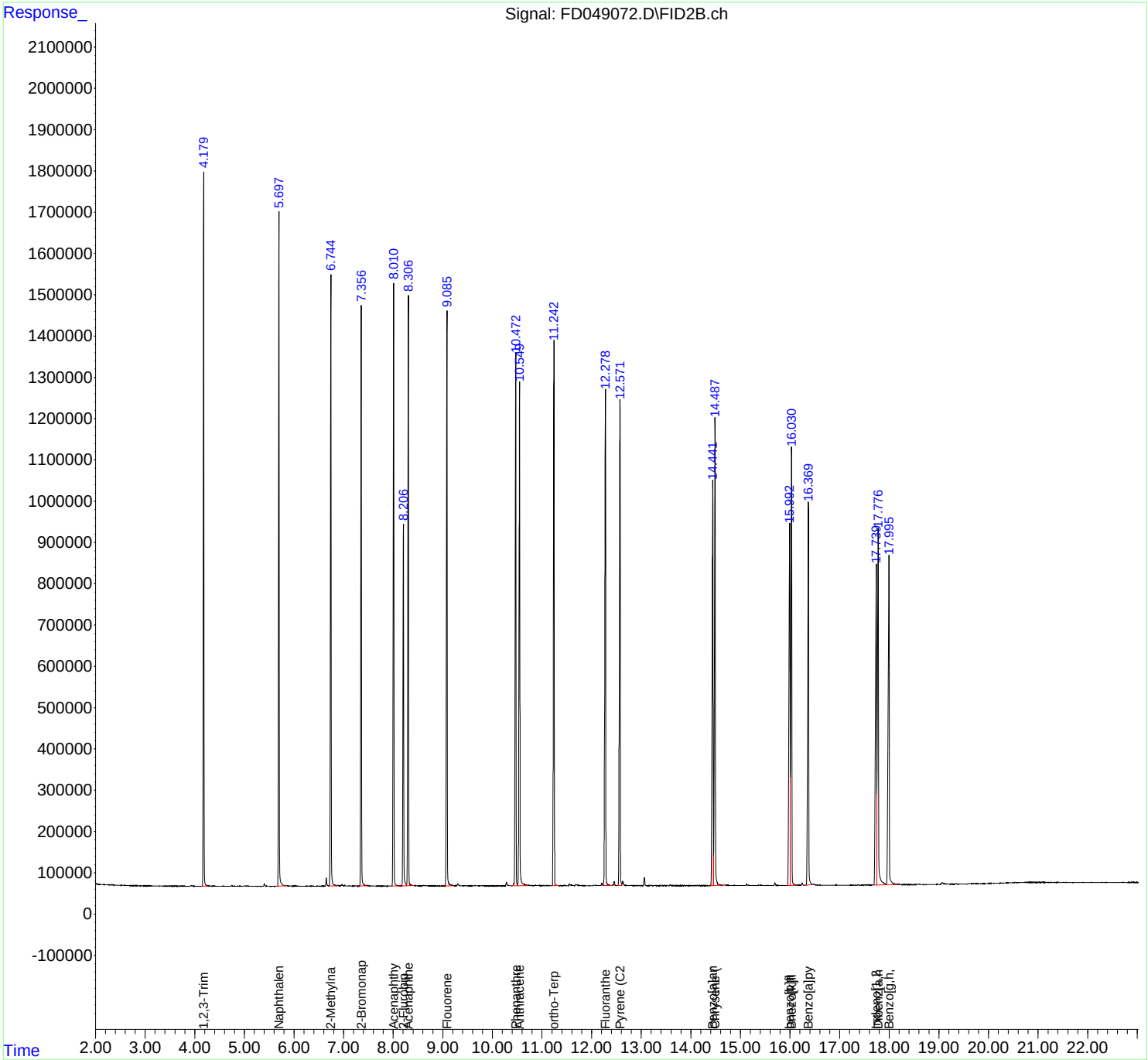
Quantitation Report (QT Reviewed)

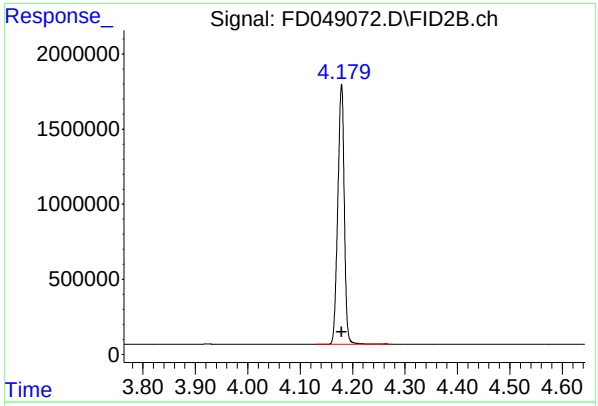
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD021125AR\
Data File : FD049072.D
Signal(s) : FID2B.ch
Acq On : 10 Feb 2025 13:22
Operator : YP/AJ
Sample : 100 PPM AROMATIC HC STD1
Misc :
ALS Vial : 62 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
100 PPM AROMATIC HC STD1

Integration File: autoint1.e
Quant Time: Feb 10 15:30:48 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Mon Feb 10 15:28:06 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

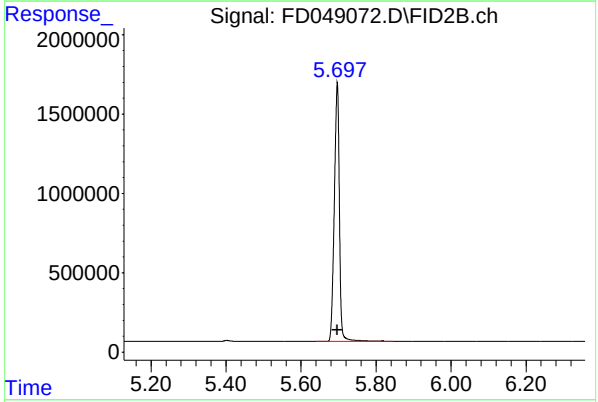





#1 1,2,3-Trimethylbenzene (C10.1)

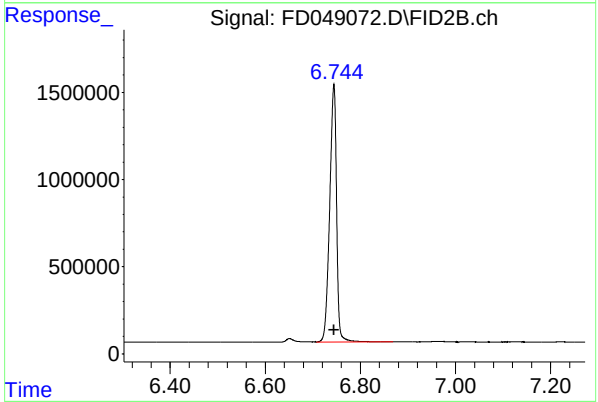
R.T.: 4.179 min
Delta R.T.: 0.000 min
Response: 14869075
Conc: 97.56 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
100 PPM AROMATIC HC STD1



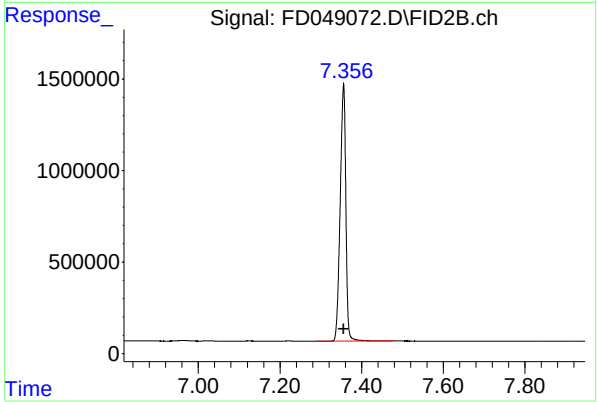

#2 Naphthalene (C11.7)

R.T.: 5.697 min
Delta R.T.: 0.000 min
Response: 15264707
Conc: 98.58 ug/ml



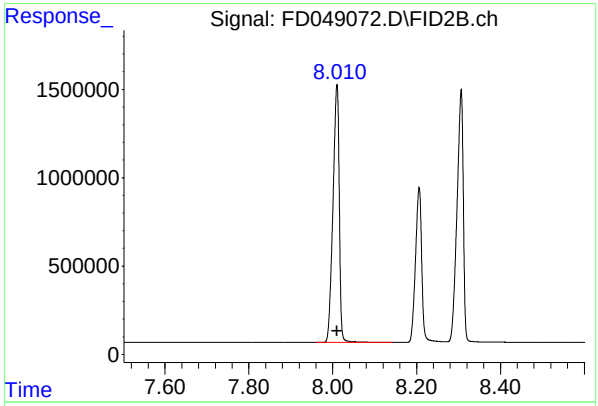

#3 2-Methylnaphthalene (C12.89)

R.T.: 6.744 min
Delta R.T.: 0.000 min
Response: 14901306
Conc: 97.97 ug/ml




#4 2-Bromonaphthalene (SURR)

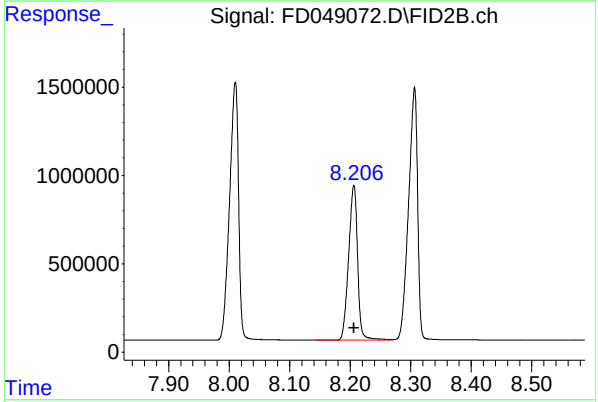
R.T.: 7.356 min
Delta R.T.: 0.000 min
Response: 13521753
Conc: 97.61 ug/ml




#5 Acenaphthylene (C15.06)

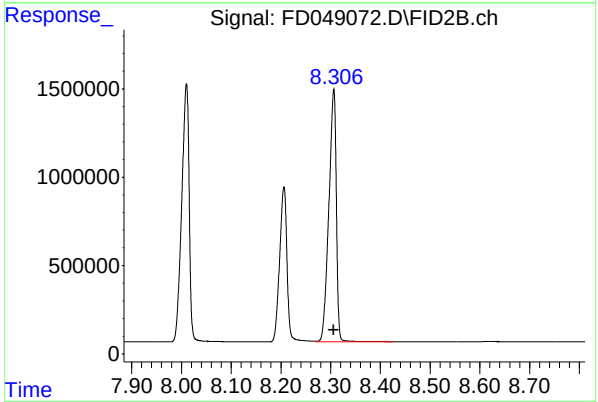
R.T.: 8.010 min
Delta R.T.: 0.000 min
Response: 15174302
Conc: 97.40 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
100 PPM AROMATIC HC STD1



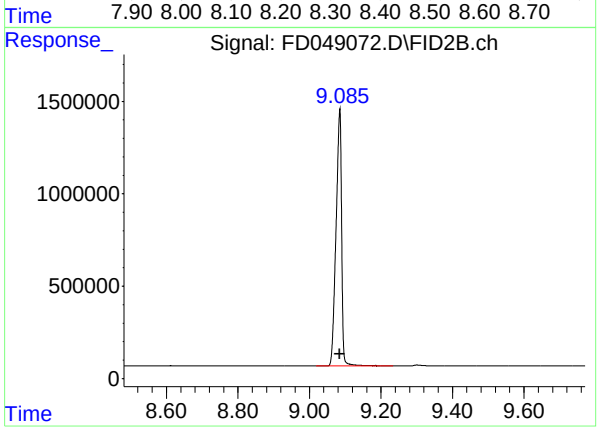

#6 2-Flurobiphenyl (SURR)

R.T.: 8.206 min
Delta R.T.: 0.000 min
Response: 9031094
Conc: 100.73 ug/ml



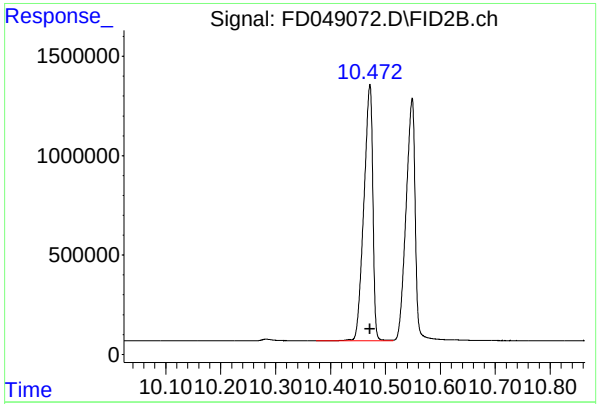

#7 Acenaphthene (C15.5)

R.T.: 8.306 min
Delta R.T.: 0.000 min
Response: 14902082
Conc: 96.33 ug/ml




#8 Flouorene (C16.55)

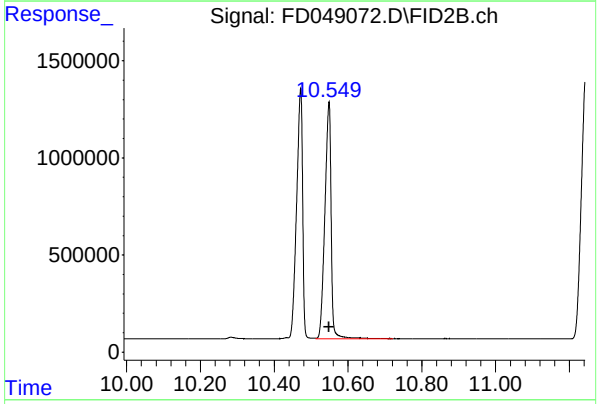
R.T.: 9.085 min
Delta R.T.: 0.000 min
Response: 14990417
Conc: 97.89 ug/ml




#9 Phenanthrene (C19.36)

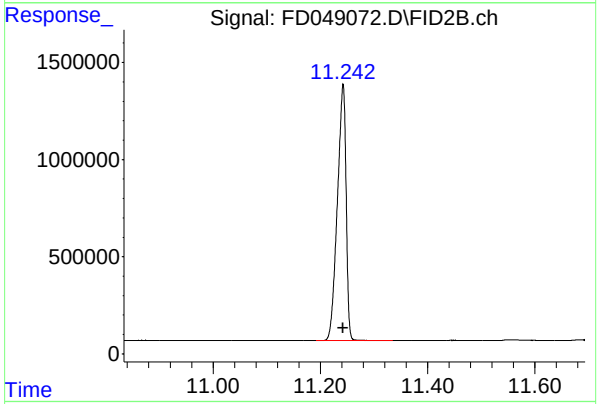
R.T.: 10.472 min
Delta R.T.: 0.000 min
Response: 14561159
Conc: 98.63 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
100 PPM AROMATIC HC STD1



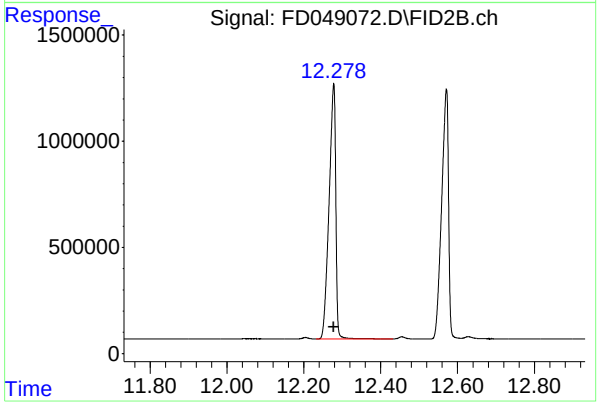

#10 Anthracene (C19.43)

R.T.: 10.548 min
Delta R.T.: 0.000 min
Response: 14369869
Conc: 97.70 ug/ml



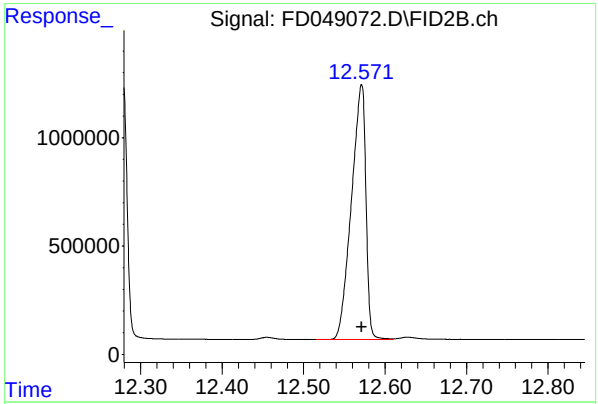

#11 ortho-Terphenyl (SURR)

R.T.: 11.242 min
Delta R.T.: 0.000 min
Response: 14903579
Conc: 96.77 ug/ml




#12 Fluoranthene (C21.85)

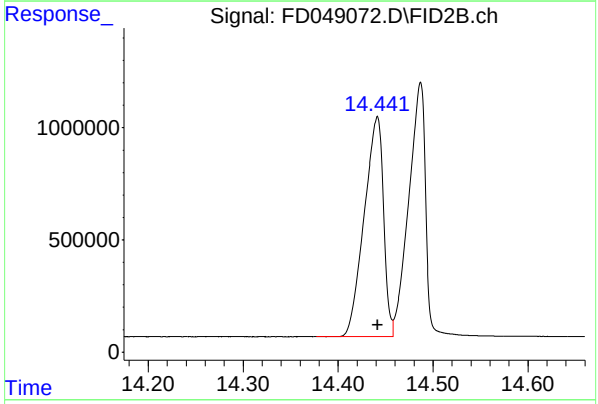
R.T.: 12.278 min
Delta R.T.: 0.000 min
Response: 14577451
Conc: 97.40 ug/ml




#13 Pyrene (C20.8)

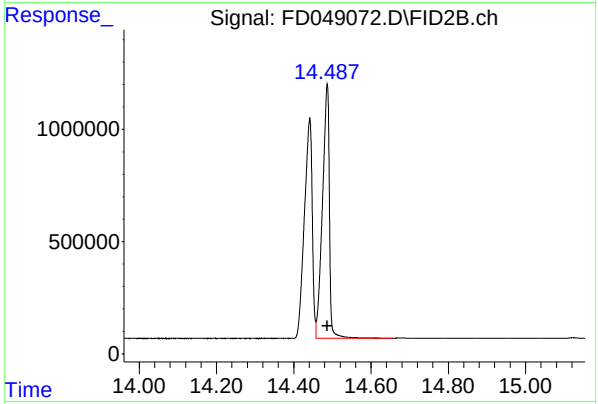
R.T.: 12.571 min
Delta R.T.: 0.000 min
Response: 14514202
Conc: 98.10 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
100 PPM AROMATIC HC STD1



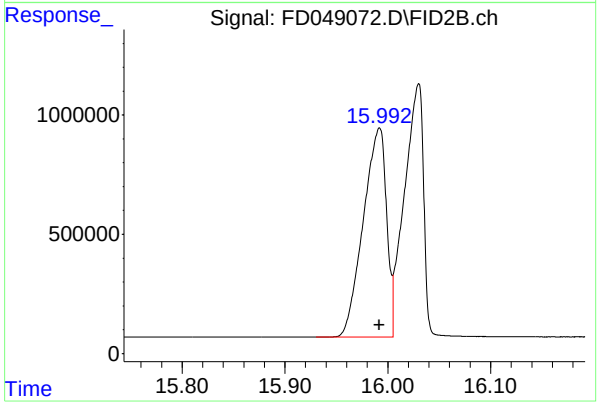

#14 Benzo[a]anthracene (C26.37)

R.T.: 14.441 min
Delta R.T.: 0.000 min
Response: 13838427
Conc: 101.14 ug/ml



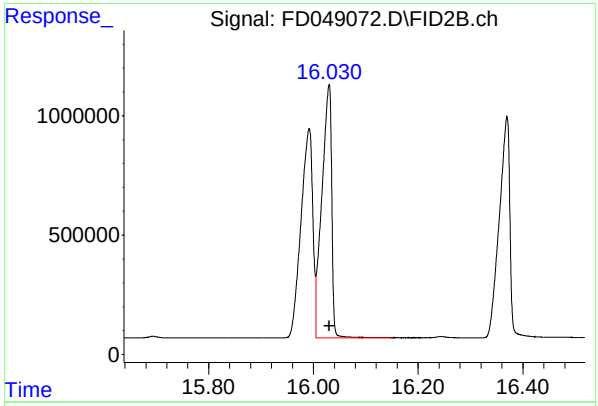

#15 Chrysene (C27.41)

R.T.: 14.487 min
Delta R.T.: 0.000 min
Response: 14067276
Conc: 95.04 ug/ml




#16 benzo[b]fluoranthene (C30.41)

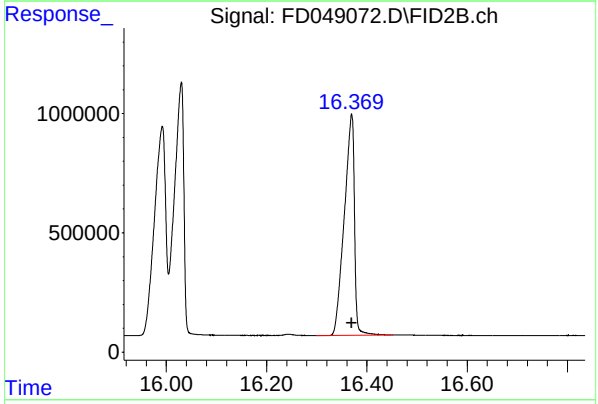
R.T.: 15.992 min
Delta R.T.: 0.000 min
Response: 13742882
Conc: 98.94 ug/ml




#17 Bnezo[k]fluoranthene (C30.14)

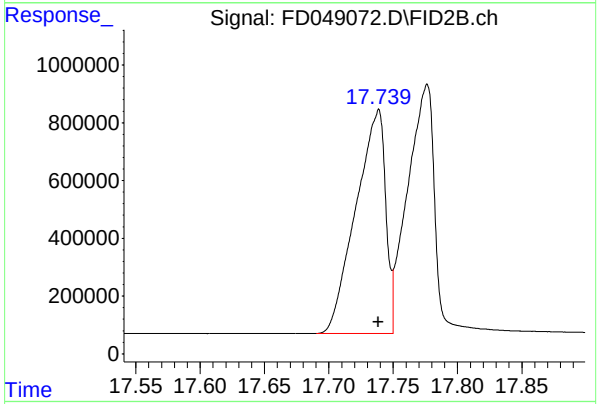
R.T.: 16.030 min
Delta R.T.: 0.000 min
Response: 13818927
Conc: 96.45 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
100 PPM AROMATIC HC STD1



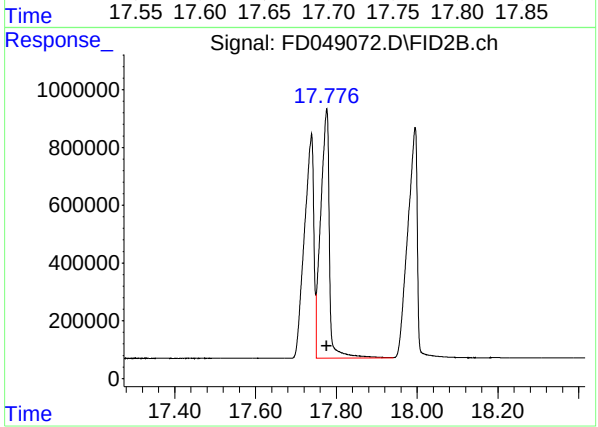

#18 Benzo[a]pyrene (C31.34)

R.T.: 16.370 min
Delta R.T.: 0.000 min
Response: 13061093
Conc: 98.61 ug/ml



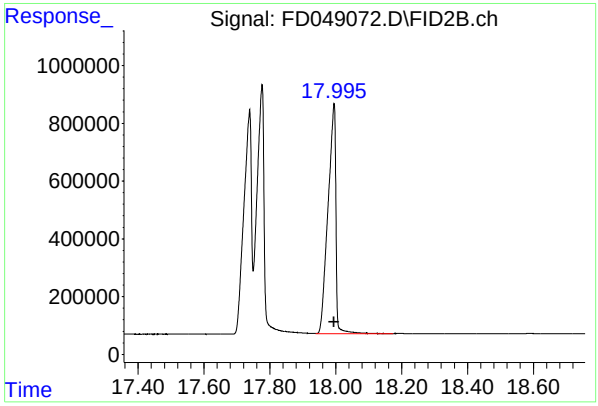

#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.738 min
Delta R.T.: 0.000 min
Response: 12478937
Conc: 107.61 ug/ml




#20 Dibenz[a,h]anthracene (C30.36)

R.T.: 17.776 min
Delta R.T.: 0.000 min
Response: 13100134
Conc: 91.49 ug/ml




#21 Benzo[g,h,i]perylene (C34.01)

R.T.: 17.995 min
Delta R.T.: 0.000 mi
Response: 13295971
Conc: 96.86 ug/m

**Instrument :**
FID_D
**ClientSampleId :**
100 PPM AROMATIC HC STD1

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD021125AR\
Data File : FD049072.D
Signal(s) : FID2B.ch
Acq On : 10 Feb 2025 13:22
Sample : 100 PPM AROMATIC HC STD1
Misc :
ALS Vial : 62 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Title : GC Extractables

Signal : FID2B.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 4.179 | 4.130 | 4.277 | BV | 1725911 | 14869075 | 97.41% | 5.075% |
| 2 | 5.697 | 5.640 | 5.845 | BV | 1634675 | 15264707 | 100.00% | 5.210% |
| 3 | 6.744 | 6.707 | 6.869 | VV | 1483646 | 14901306 | 97.62% | 5.086% |
| 4 | 7.356 | 7.289 | 7.477 | BB | 1400044 | 13521753 | 88.58% | 4.615% |
| 5 | 8.010 | 7.960 | 8.144 | BB | 1461744 | 15174302 | 99.41% | 5.179% |
| 6 | 8.206 | 8.144 | 8.271 | BV | 877931 | 9031094 | 59.16% | 3.082% |
| 7 | 8.306 | 8.271 | 8.425 | VB | 1434092 | 14902082 | 97.62% | 5.086% |
| 8 | 9.085 | 9.019 | 9.234 | BB | 1398721 | 14990417 | 98.20% | 5.116% |
| 9 | 10.472 | 10.374 | 10.514 | BV | 1291889 | 14561159 | 95.39% | 4.970% |
| 10 | 10.548 | 10.514 | 10.722 | VB | 1219536 | 14369869 | 94.14% | 4.905% |
| 11 | 11.242 | 11.192 | 11.335 | BB | 1319058 | 14903579 | 97.63% | 5.087% |
| 12 | 12.278 | 12.232 | 12.432 | VV | 1208983 | 14577451 | 95.50% | 4.976% |
| 13 | 12.571 | 12.515 | 12.610 | BV | 1180482 | 14514202 | 95.08% | 4.954% |
| 14 | 14.441 | 14.377 | 14.458 | BV | 983584 | 13838427 | 90.66% | 4.723% |
| 15 | 14.487 | 14.458 | 14.657 | VV | 1134752 | 14067276 | 92.16% | 4.801% |
| 16 | 15.992 | 15.930 | 16.005 | BV | 877521 | 13742882 | 90.03% | 4.691% |
| 17 | 16.030 | 16.005 | 16.152 | VB | 1064780 | 13818927 | 90.53% | 4.717% |
| 18 | 16.370 | 16.299 | 16.452 | BV | 929001 | 13061093 | 85.56% | 4.458% |
| 19 | 17.738 | 17.690 | 17.750 | BV | 775881 | 12478937 | 81.75% | 4.259% |
| 20 | 17.776 | 17.750 | 17.940 | VV | 865574 | 13100134 | 85.82% | 4.471% |
| 21 | 17.995 | 17.940 | 18.174 | VV | 799393 | 13295971 | 87.10% | 4.538% |

Sum of corrected areas: 292984644

Aromatic EPH 021125.M Tue Feb 11 00:32:56 2025

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

| | | | |
|---|---|---|---|
| Lab Sample ID: | 50 PPM AROMATIC HC S | Acq On: | 10 Feb 2025 13:58 |
| Client Sample ID: | | Operator: | YP/AJ |
| Data file: | FD049073.D | Misc: | |
| Instrument: | FID_D | ALS Vial: | 63 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | Units |
|---|---|---|---|---|---|
| Aromatic C10-C12 | 4.075 | 5.793 | 15194817.000 | 100.000 | ug/ml |
| Aromatic C12-C16 | 5.794 | 8.396 | 22823722.000 | 150.000 | ug/ml |
| Aromatic C16-C21 | 8.397 | 12.658 | 29734390.000 | 200.000 | ug/ml |
| Aromatic C21-C36 | 12.659 | 18.067 | 62220992.000 | 450.000 | ug/ml |
| Aromatic EPH | 4.075 | 18.067 | 129973921.000 | 900.000 | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD021125AR\
Data File : FD049073.D
Signal(s) : FID2B.ch
Acq On : 10 Feb 2025 13:58
Operator : YP/AJ
Sample : 50 PPM AROMATIC HC STD2
Misc :
ALS Vial : 63 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
50 PPM AROMATIC HC STD2

Integration File: autoint1.e
Quant Time: Feb 10 15:32:44 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Mon Feb 10 15:28:06 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

| | Compound | R.T. | Response | Conc Units |
|---|---|---|---|---|
| | **System Monitoring Compounds** | | | |
| 4) | S 2-Bromonaphthalene (S... | 7.352 | 6832671 | 49.548 ug/ml |
| | Spiked Amount 50.000 | | Recovery = | 99.10% |
| 6) | S 2-Flurobiphenyl (SURR) | 8.201 | 4519240 | 50.269 ug/ml |
| | Spiked Amount 50.000 Range 0 - 131 | | Recovery = | 100.54% |
| 11) | S ortho-Terphenyl (SURR) | 11.236 | 7609409 | 49.605 ug/ml |
| | Spiked Amount 50.000 | | Recovery = | 99.21% |
| | **Target Compounds** | | | |
| 1) | T 1,2,3-Trimethylbenzen... | 4.176 | 7483064 | 49.395 ug/ml |
| 2) | T Naphthalene (C11.7) | 5.693 | 7711753 | 49.870 ug/ml |
| 3) | T 2-Methylnaphthalene (... | 6.740 | 7516774 | 49.613 ug/ml |
| 5) | T Acenaphthylene (C15.06) | 8.005 | 7704821 | 49.636 ug/ml |
| 7) | T Acenaphthene (C15.5) | 8.300 | 7602127 | 49.425 ug/ml |
| 8) | T Flouorene (C16.55) | 9.078 | 7593219 | 49.722 ug/ml |
| 9) | T Phenanthrene (C19.36) | 10.465 | 7379729 | 49.990 ug/ml |
| 10) | T Anthracene (C19.43) | 10.541 | 7344304 | 49.955 ug/ml |
| 12) | T Fluoranthene (C21.85) | 12.270 | 7455312 | 49.876 ug/ml |
| 13) | T Pyrene (C20.8) | 12.562 | 7417138 | 50.088 ug/ml |
| 14) | T Benzo[a]anthracene (C... | 14.434 | 6964194 | 50.597 ug/ml |
| 15) | T Chrysene (C27.41) | 14.475 | 7274381 | 49.429 ug/ml |
| 16) | T benzo[b]fluoranthene ... | 15.983 | 6978240 | 50.160 ug/ml |
| 17) | T Bnezo[k]fluoranthene ... | 16.015 | 7115728 | 49.346 ug/ml |
| 18) | T Benzo[a]pyrene (C31.34) | 16.357 | 6633881 | 50.057 ug/ml |
| 19) | T Indeno[1,2,3-cd]pyren... | 17.724 | 5940391 | 50.812 ug/ml |
| 20) | T Dibenz[a,h]anthracene... | 17.760 | 7026106 | 49.374 ug/ml |
| 21) | T Benzo[g,h,i]perylene ... | 17.977 | 6832759 | 49.851 ug/ml |

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

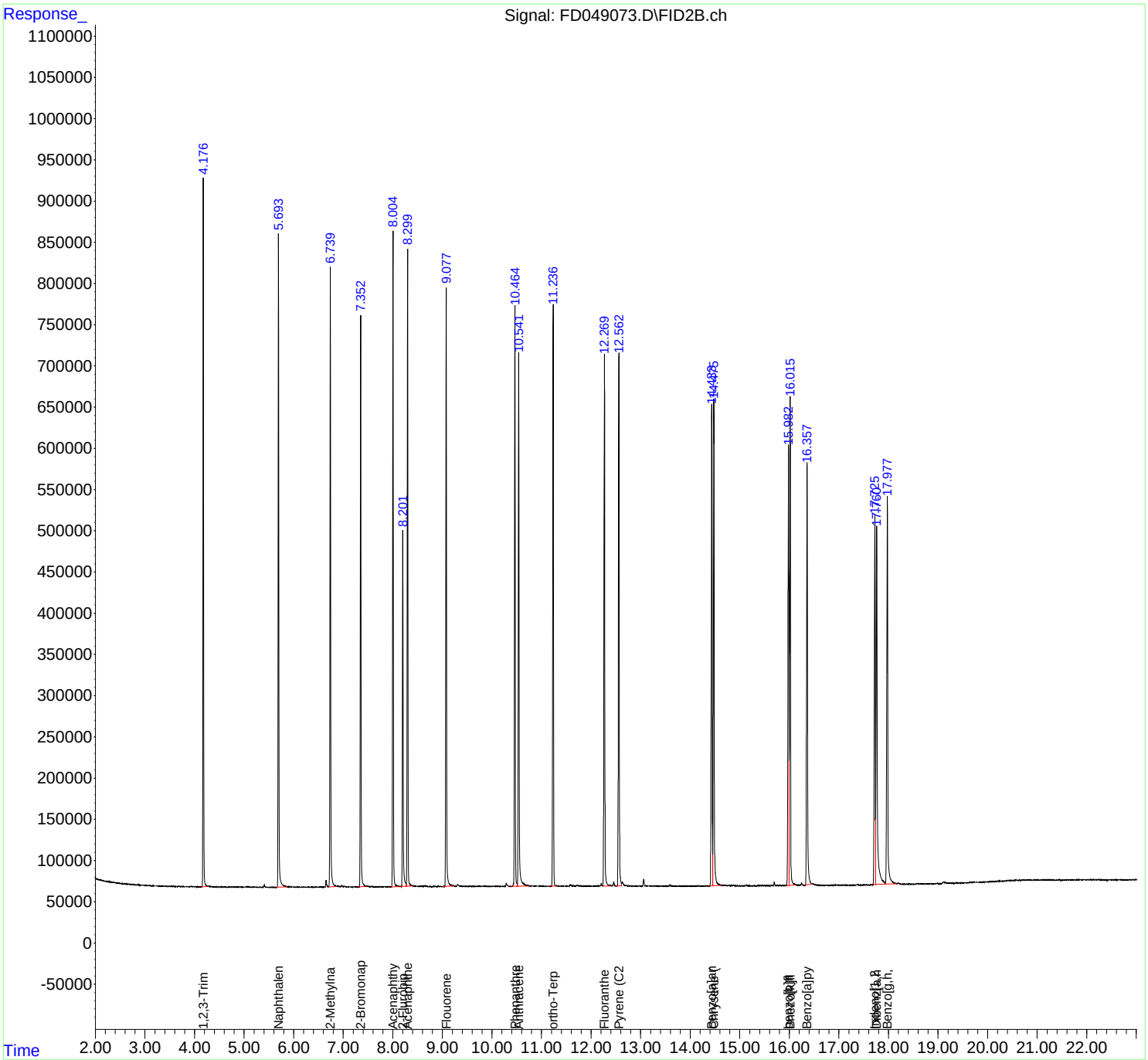
Quantitation Report (QT Reviewed)

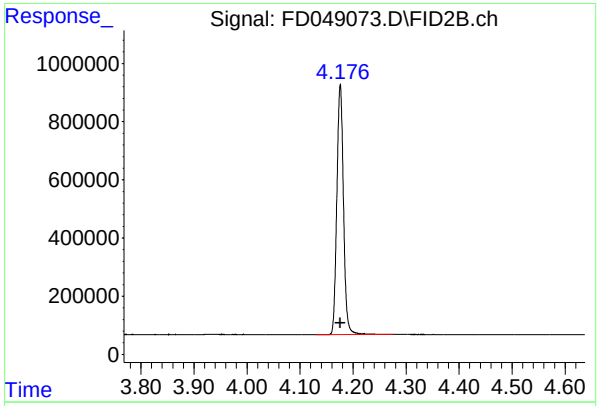
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD021125AR\
Data File : FD049073.D
Signal(s) : FID2B.ch
Acq On : 10 Feb 2025 13:58
Operator : YP/AJ
Sample : 50 PPM AROMATIC HC STD2
Misc :
ALS Vial : 63 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
50 PPM AROMATIC HC STD2

Integration File: autoint1.e
Quant Time: Feb 10 15:32:44 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Mon Feb 10 15:28:06 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

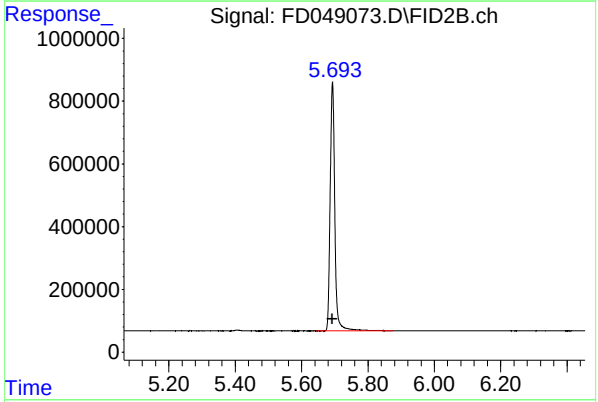





#1 1,2,3-Trimethylbenzene (C10.1)

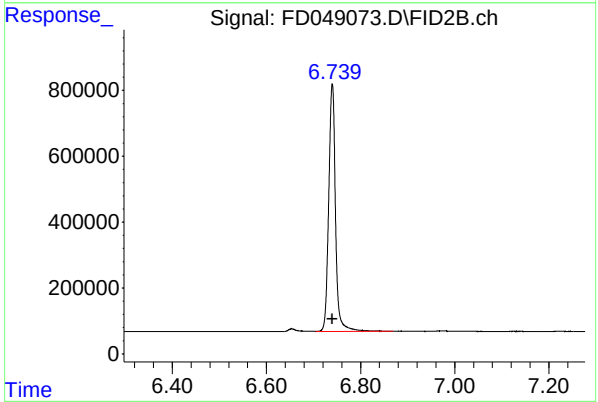
R.T.: 4.176 min
Delta R.T.: 0.000 min
Response: 7483064
Conc: 49.40 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
50 PPM AROMATIC HC STD2



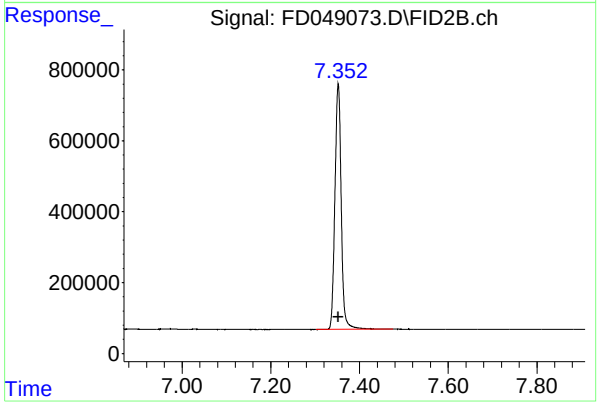

#2 Naphthalene (C11.7)

R.T.: 5.693 min
Delta R.T.: 0.000 min
Response: 7711753
Conc: 49.87 ug/ml



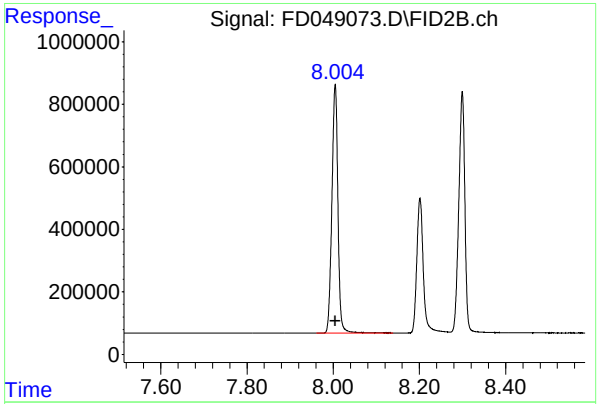

#3 2-Methylnaphthalene (C12.89)

R.T.: 6.740 min
Delta R.T.: 0.000 min
Response: 7516774
Conc: 49.61 ug/ml




#4 2-Bromonaphthalene (SURR)

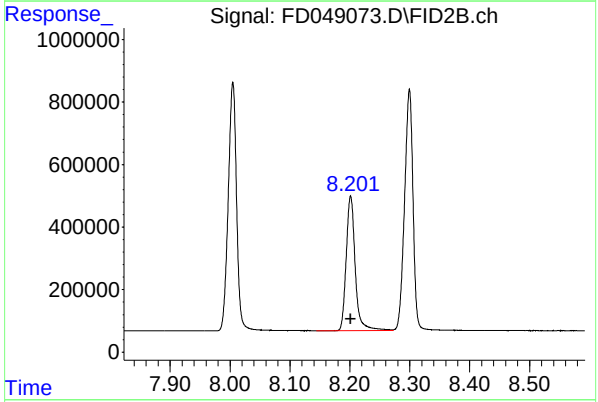
R.T.: 7.352 min
Delta R.T.: 0.000 min
Response: 6832671
Conc: 49.55 ug/ml




#5 Acenaphthylene (C15.06)

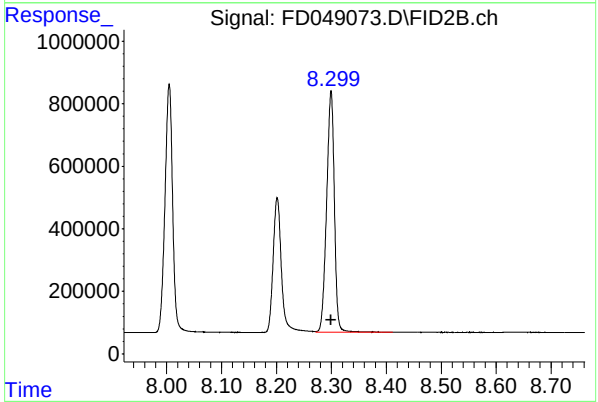
R.T.: 8.005 min
Delta R.T.: 0.000 min
Response: 7704821
Conc: 49.64 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
50 PPM AROMATIC HC STD2



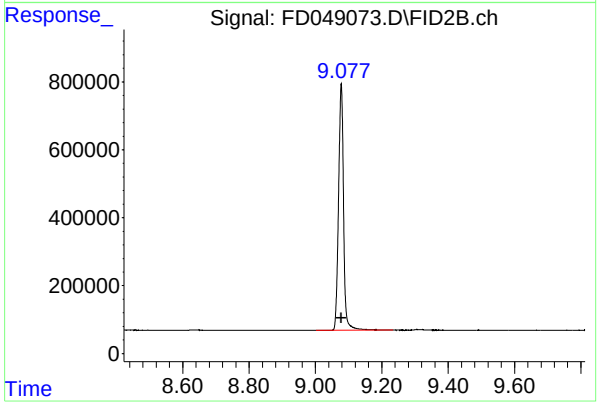

#6 2-Flurobiphenyl (SURR)

R.T.: 8.201 min
Delta R.T.: 0.000 min
Response: 4519240
Conc: 50.27 ug/ml



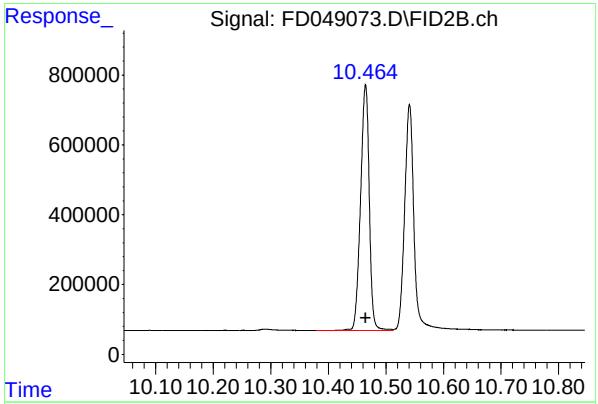

#7 Acenaphthene (C15.5)

R.T.: 8.300 min
Delta R.T.: 0.000 min
Response: 7602127
Conc: 49.42 ug/ml




#8 Flouorene (C16.55)

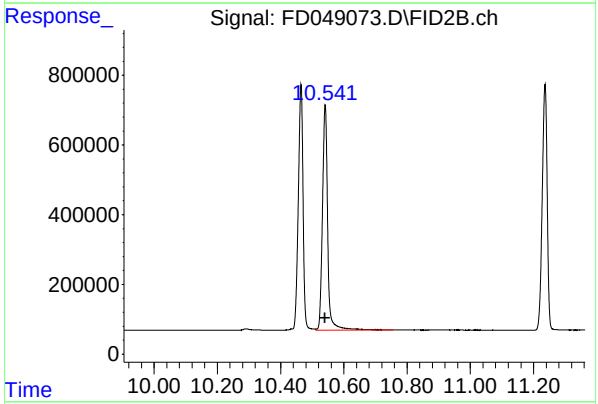
R.T.: 9.078 min
Delta R.T.: 0.000 min
Response: 7593219
Conc: 49.72 ug/ml




#9 Phenanthrene (C19.36)

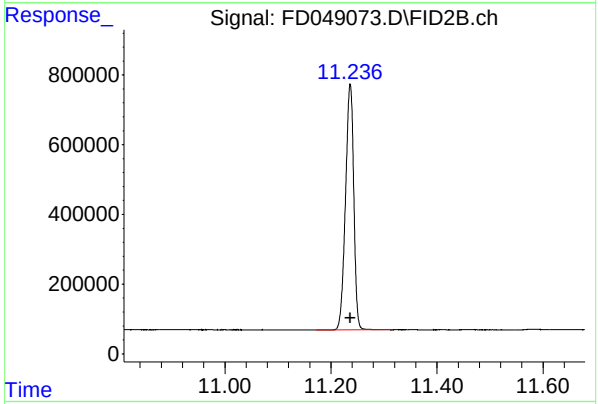
R.T.: 10.465 min
Delta R.T.: 0.000 min
Response: 7379729
Conc: 49.99 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
50 PPM AROMATIC HC STD2



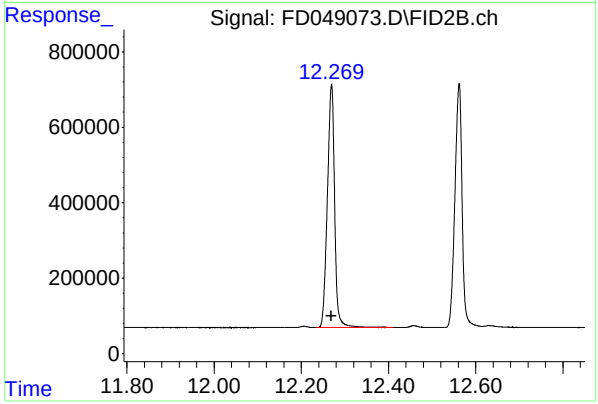

#10 Anthracene (C19.43)

R.T.: 10.541 min
Delta R.T.: 0.000 min
Response: 7344304
Conc: 49.96 ug/ml



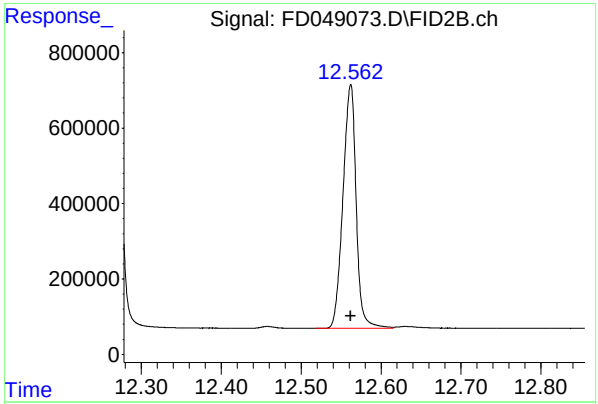

#11 ortho-Terphenyl (SURR)

R.T.: 11.236 min
Delta R.T.: 0.000 min
Response: 7609409
Conc: 49.60 ug/ml




#12 Fluoranthene (C21.85)

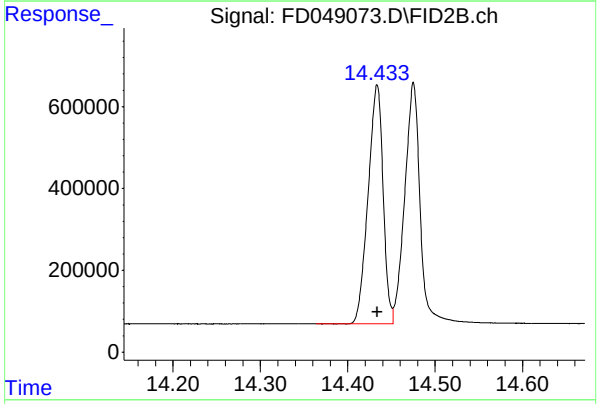
R.T.: 12.270 min
Delta R.T.: 0.000 min
Response: 7455312
Conc: 49.88 ug/ml




#13 Pyrene (C20.8)

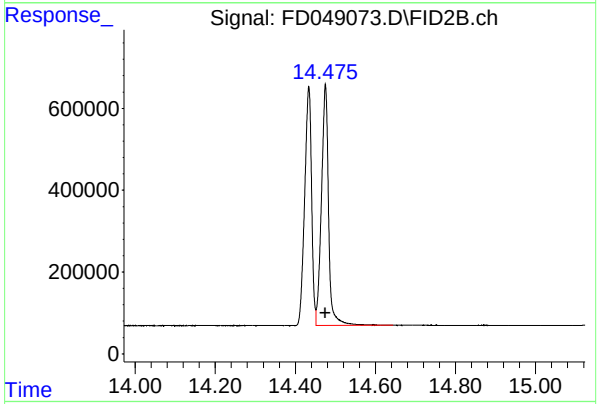
R.T.: 12.562 min
Delta R.T.: 0.000 min
Response: 7417138
Conc: 50.09 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
50 PPM AROMATIC HC STD2



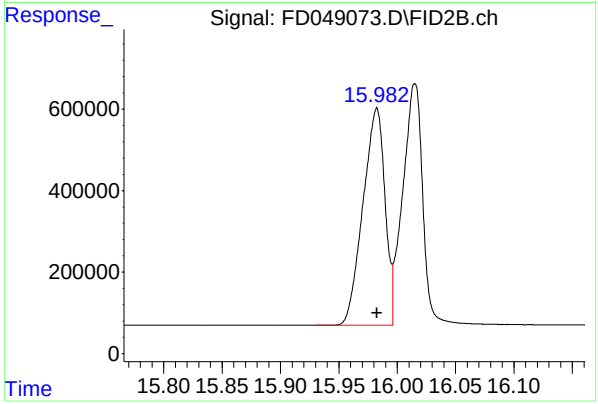

#14 Benzo[a]anthracene (C26.37)

R.T.: 14.434 min
Delta R.T.: 0.000 min
Response: 6964194
Conc: 50.60 ug/ml



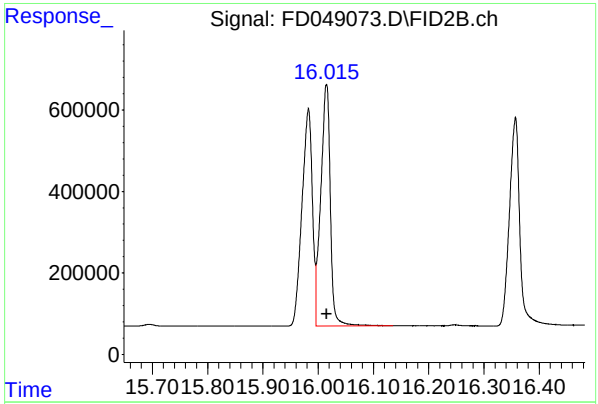

#15 Chrysene (C27.41)

R.T.: 14.475 min
Delta R.T.: 0.000 min
Response: 7274381
Conc: 49.43 ug/ml




#16 benzo[b]fluoranthene (C30.41)

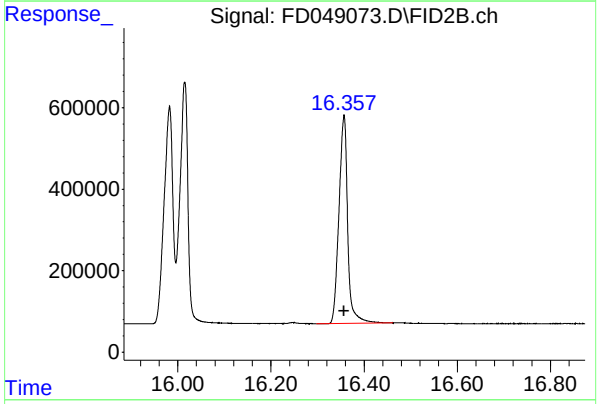
R.T.: 15.983 min
Delta R.T.: 0.000 min
Response: 6978240
Conc: 50.16 ug/ml




#17 Bnezo[k]fluoranthene (C30.14)

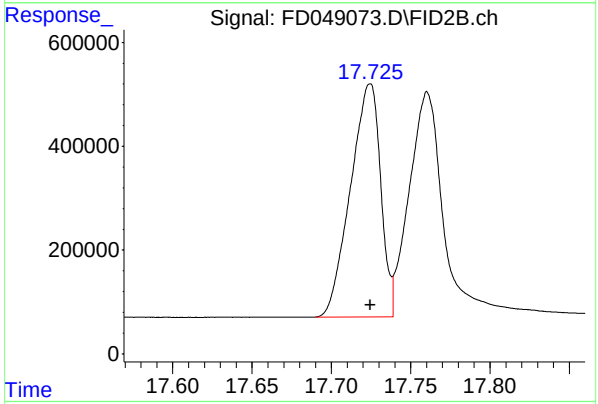
R.T.: 16.015 min
Delta R.T.: 0.000 min
Response: 7115728
Conc: 49.35 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
50 PPM AROMATIC HC STD2



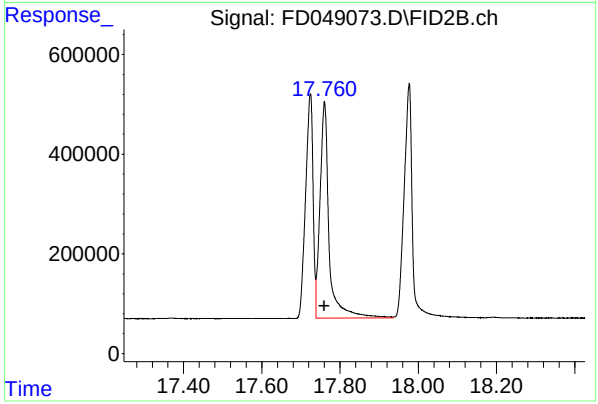

#18 Benzo[a]pyrene (C31.34)

R.T.: 16.357 min
Delta R.T.: 0.000 min
Response: 6633881
Conc: 50.06 ug/ml



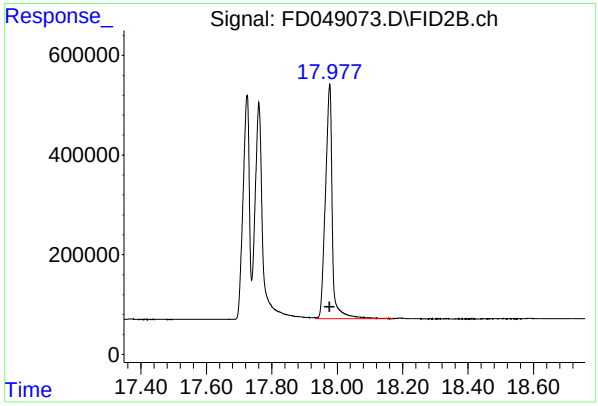

#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.724 min
Delta R.T.: 0.000 min
Response: 5940391
Conc: 50.81 ug/ml




#20 Dibenz[a,h]anthracene (C30.36)

R.T.: 17.760 min
Delta R.T.: 0.000 min
Response: 7026106
Conc: 49.37 ug/ml




#21 Benzo[g,h,i]perylene (C34.01)

R.T.: 17.977 min
Delta R.T.: 0.000 mi
Response: 6832759
Conc: 49.85 ug/m

**Instrument :**
FID_D
**ClientSampleId :**
50 PPM AROMATIC HC STD2

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD021125AR\
Data File : FD049073.D
Signal(s) : FID2B.ch
Acq On : 10 Feb 2025 13:58
Sample : 50 PPM AROMATIC HC STD2
Misc :
ALS Vial : 63 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Title : GC Extractables

Signal : FID2B.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 4.176 | 4.130 | 4.275 | BB | 856930 | 7483064 | 97.03% | 5.024% |
| 2 | 5.693 | 5.644 | 5.875 | BB | 793670 | 7711753 | 100.00% | 5.178% |
| 3 | 6.740 | 6.705 | 6.869 | VV | 752280 | 7516774 | 97.47% | 5.047% |
| 4 | 7.352 | 7.302 | 7.475 | BB | 692518 | 6832671 | 88.60% | 4.588% |
| 5 | 8.005 | 7.960 | 8.139 | BB | 796415 | 7704821 | 99.91% | 5.173% |
| 6 | 8.201 | 8.144 | 8.272 | BV | 430213 | 4519240 | 58.60% | 3.034% |
| 7 | 8.300 | 8.272 | 8.412 | VB | 773593 | 7602127 | 98.58% | 5.104% |
| 8 | 9.078 | 9.002 | 9.234 | BB | 724789 | 7593219 | 98.46% | 5.098% |
| 9 | 10.465 | 10.379 | 10.512 | BV | 704297 | 7379729 | 95.69% | 4.955% |
| 10 | 10.541 | 10.512 | 10.755 | VB | 647346 | 7344304 | 95.24% | 4.931% |
| 11 | 11.236 | 11.172 | 11.317 | BB | 704623 | 7609409 | 98.67% | 5.109% |
| 12 | 12.270 | 12.234 | 12.410 | PV | 646673 | 7455312 | 96.67% | 5.006% |
| 13 | 12.562 | 12.519 | 12.615 | BV | 647073 | 7417138 | 96.18% | 4.980% |
| 14 | 14.434 | 14.364 | 14.452 | BV | 584665 | 6964194 | 90.31% | 4.676% |
| 15 | 14.475 | 14.452 | 14.644 | VB | 589498 | 7274381 | 94.33% | 4.884% |
| 16 | 15.983 | 15.930 | 15.996 | BV | 532011 | 6978240 | 90.49% | 4.685% |
| 17 | 16.015 | 15.996 | 16.135 | VB | 592968 | 7115728 | 92.27% | 4.778% |
| 18 | 16.357 | 16.297 | 16.462 | BV | 511495 | 6633881 | 86.02% | 4.454% |
| 19 | 17.724 | 17.690 | 17.739 | BV | 449892 | 5940391 | 77.03% | 3.989% |
| 20 | 17.760 | 17.739 | 17.935 | VV | 434204 | 7026106 | 91.11% | 4.718% |
| 21 | 17.977 | 17.935 | 18.170 | VV | 469618 | 6832759 | 88.60% | 4.588% |

Sum of corrected areas: 148935240

Aromatic EPH 021125.M Tue Feb 11 00:33:22 2025

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

| | | | |
|---|---|---|---|
| Lab Sample ID: | 20 PPM AROMATIC HC S | Acq On: | 10 Feb 2025 14:35 |
| Client Sample ID: | | Operator: | YP/AJ |
| Data file: | FD049074.D | Misc: | |
| Instrument: | FID_D | ALS Vial: | 64 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | Units |
|---|---|---|---|---|---|
| Aromatic C10-C12 | 4.075 | 5.793 | 6263156.000 | 40.000 | ug/ml |
| Aromatic C12-C16 | 5.794 | 8.396 | 9507721.000 | 60.000 | ug/ml |
| Aromatic C16-C21 | 8.397 | 12.658 | 12145436.000 | 80.000 | ug/ml |
| Aromatic C21-C36 | 12.659 | 18.067 | 25499877.000 | 180.000 | ug/ml |
| Aromatic EPH | 4.075 | 18.067 | 53416190.000 | 360.000 | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD021125AR\
Data File : FD049074.D
Signal(s) : FID2B.ch
Acq On : 10 Feb 2025 14:35
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD3
Misc :
ALS Vial : 64 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD3

Integration File: autoint1.e
Quant Time: Feb 10 15:28:30 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Mon Feb 10 15:28:06 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

| | Compound | R.T. | Response | Conc | Units |
|---|---|---|---|---|---|
| | **System Monitoring Compounds** | | | | |
| 4) | S 2-Bromonaphthalene (S... | 7.351 | 2836644 | 20.000 | ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 40.00% | |
| 6) | S 2-Flurobiphenyl (SURR) | 8.202 | 1780140 | 20.000 | ug/ml |
| Spiked Amount | 50.000 Range | 0 - 131 | Recovery = | 40.00% | |
| 11) | S ortho-Terphenyl (SURR) | 11.233 | 3179603 | 20.000 | ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 40.00% | |
| | **Target Compounds** | | | | |
| 1) | T 1,2,3-Trimethylbenzen... | 4.176 | 3122576 | 20.000 | ug/ml |
| 2) | T Naphthalene (C11.7) | 5.693 | 3140580 | 20.000 | ug/ml |
| 3) | T 2-Methylnaphthalene (... | 6.739 | 3103501 | 20.000 | ug/ml |
| 5) | T Acenaphthylene (C15.06) | 8.003 | 3196723 | 20.000 | ug/ml |
| 7) | T Acenaphthene (C15.5) | 8.296 | 3207497 | 20.000 | ug/ml |
| 8) | T Flouorene (C16.55) | 9.076 | 3127465 | 20.000 | ug/ml |
| 9) | T Phenanthrene (C19.36) | 10.463 | 2993262 | 20.000 | ug/ml |
| 10) | T Anthracene (C19.43) | 10.540 | 3009407 | 20.000 | ug/ml |
| 12) | T Fluoranthene (C21.85) | 12.267 | 3071055 | 20.000 | ug/ml |
| 13) | T Pyrene (C20.8) | 12.558 | 3015302 | 20.000 | ug/ml |
| 14) | T Benzo[a]anthracene (C... | 14.429 | 2705035 | 20.000 | ug/ml |
| 15) | T Chrysene (C27.41) | 14.469 | 3106970 | 20.000 | ug/ml |
| 16) | T benzo[b]fluoranthene ... | 15.976 | 2807258 | 20.000 | ug/ml |
| 17) | T Bnezo[k]fluoranthene ... | 16.006 | 3041925 | 20.000 | ug/ml |
| 18) | T Benzo[a]pyrene (C31.34) | 16.354 | 2685830 | 20.000 | ug/ml |
| 19) | T Indeno[1,2,3-cd]pyren... | 17.718 | 2142662 | 20.000 | ug/ml |
| 20) | T Dibenz[a,h]anthracene... | 17.759 | 3107681 | 20.000 | ug/ml |
| 21) | T Benzo[g,h,i]perylene ... | 17.966 | 2831461 | 20.000 | ug/ml |

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

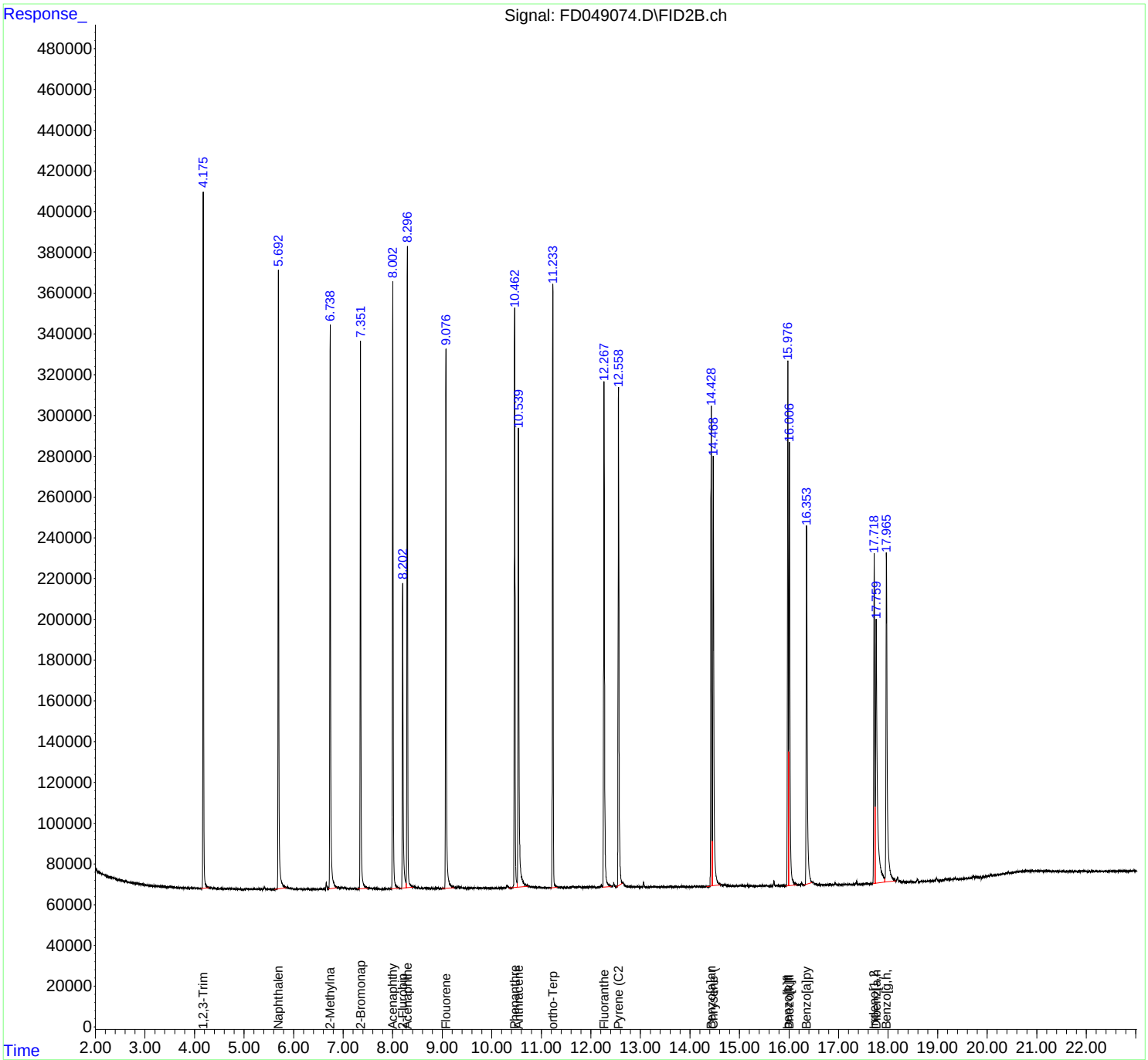
Quantitation Report (QT Reviewed)

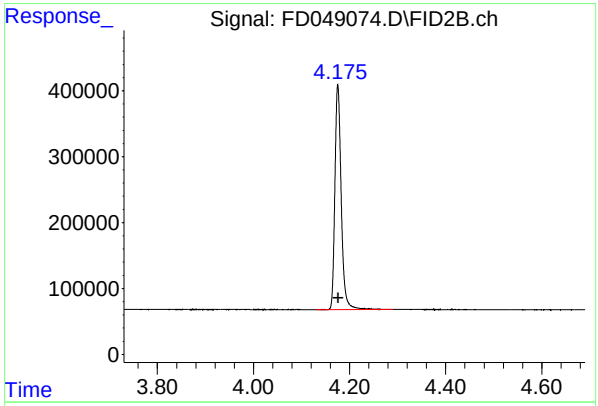
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD021125AR\
Data File : FD049074.D
Signal(s) : FID2B.ch
Acq On : 10 Feb 2025 14:35
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD3
Misc :
ALS Vial : 64 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD3

Integration File: autoint1.e
Quant Time: Feb 10 15:28:30 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Mon Feb 10 15:28:06 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

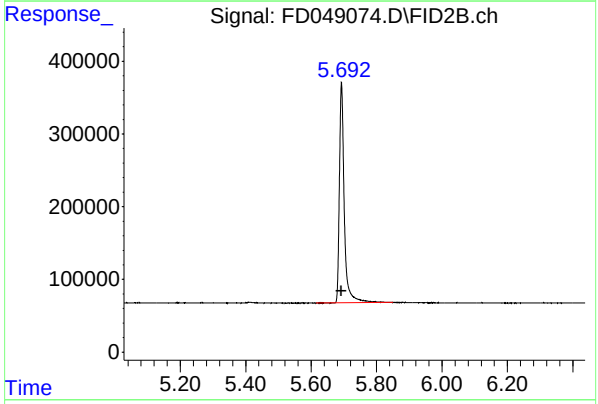





#1 1,2,3-Trimethylbenzene (C10.1)

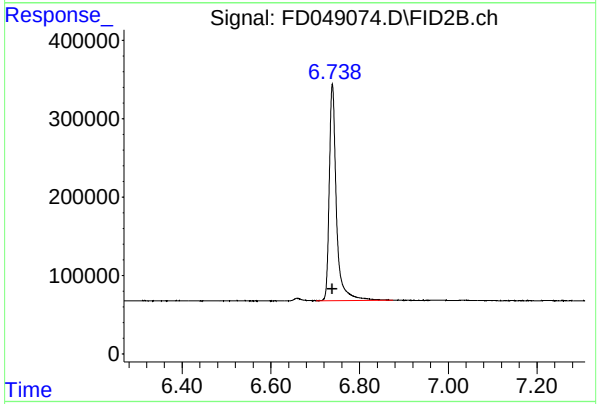
R.T.: 4.176 min
Delta R.T.: 0.000 min
Response: 3122576
Conc: 20.00 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD3



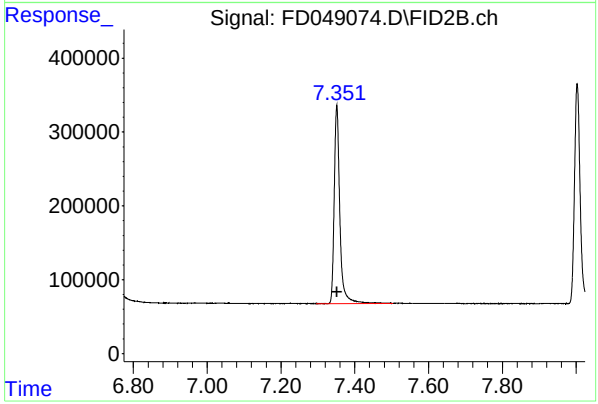

#2 Naphthalene (C11.7)

R.T.: 5.693 min
Delta R.T.: 0.000 min
Response: 3140580
Conc: 20.00 ug/ml



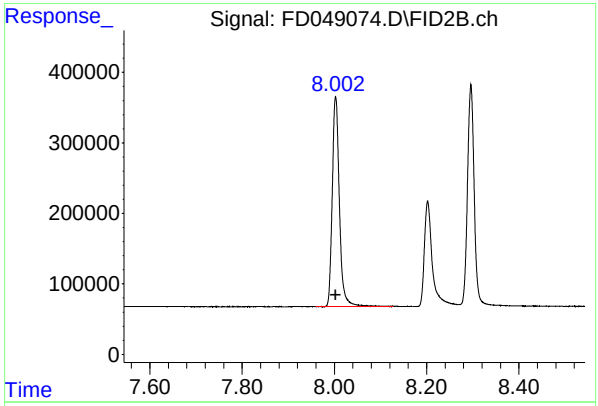

#3 2-Methylnaphthalene (C12.89)

R.T.: 6.739 min
Delta R.T.: 0.000 min
Response: 3103501
Conc: 20.00 ug/ml




#4 2-Bromonaphthalene (SURR)

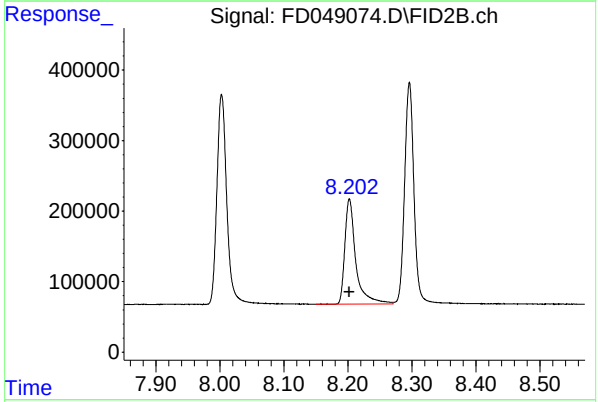
R.T.: 7.351 min
Delta R.T.: 0.000 min
Response: 2836644
Conc: 20.00 ug/ml




#5 Acenaphthylene (C15.06)

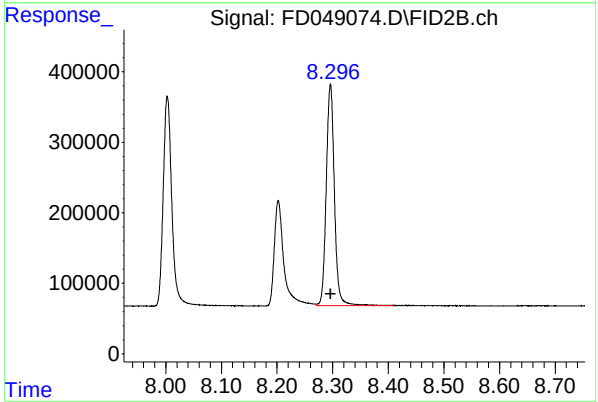
R.T.: 8.003 min
Delta R.T.: 0.000 min
Response: 3196723
Conc: 20.00 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD3



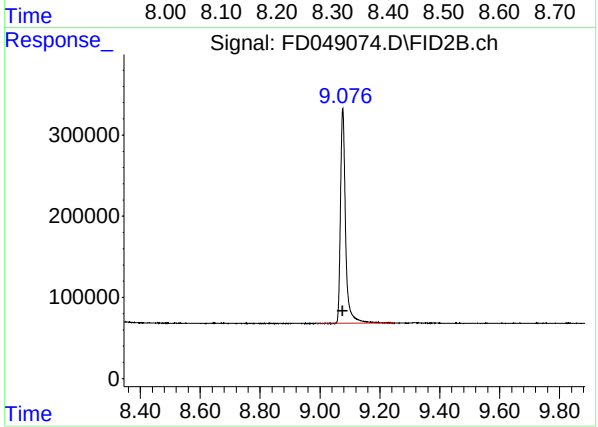

#6 2-Flurobiphenyl (SURR)

R.T.: 8.202 min
Delta R.T.: 0.000 min
Response: 1780140
Conc: 20.00 ug/ml



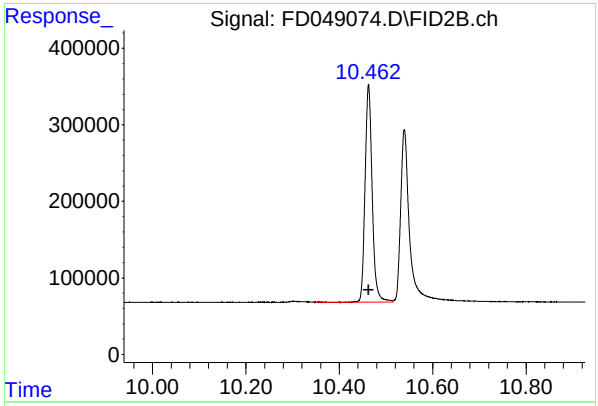

#7 Acenaphthene (C15.5)

R.T.: 8.296 min
Delta R.T.: 0.000 min
Response: 3207497
Conc: 20.00 ug/ml




#8 Flouorene (C16.55)

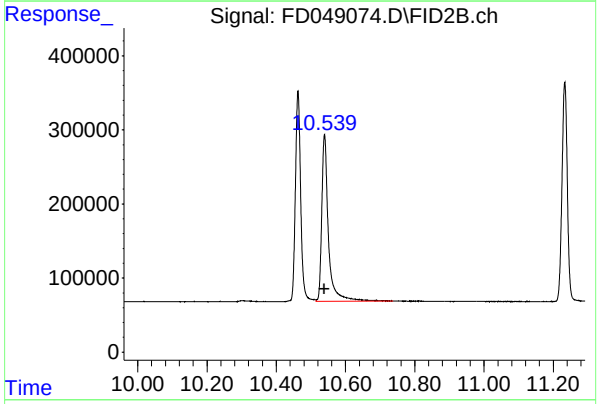
R.T.: 9.076 min
Delta R.T.: 0.000 min
Response: 3127465
Conc: 20.00 ug/ml




#9 Phenanthrene (C19.36)

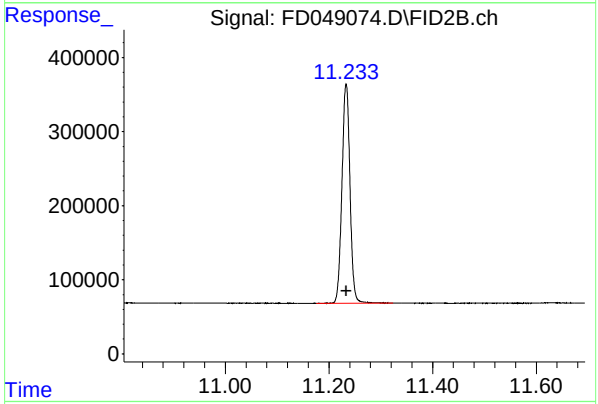
R.T.: 10.463 min
Delta R.T.: 0.000 min
Response: 2993262
Conc: 20.00 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD3



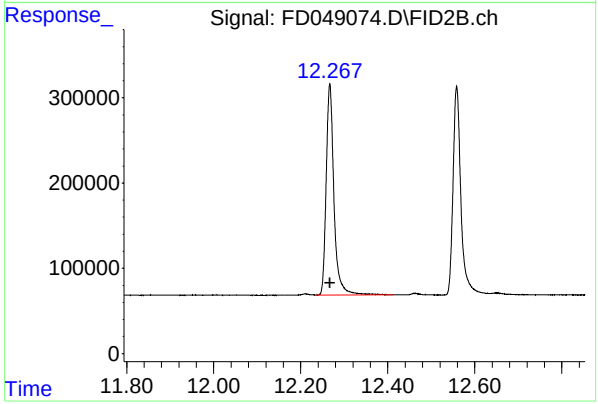

#10 Anthracene (C19.43)

R.T.: 10.540 min
Delta R.T.: 0.000 min
Response: 3009407
Conc: 20.00 ug/ml



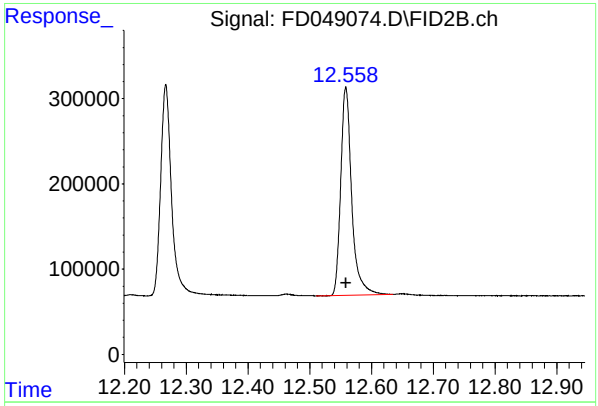

#11 ortho-Terphenyl (SURR)

R.T.: 11.233 min
Delta R.T.: 0.000 min
Response: 3179603
Conc: 20.00 ug/ml




#12 Fluoranthene (C21.85)

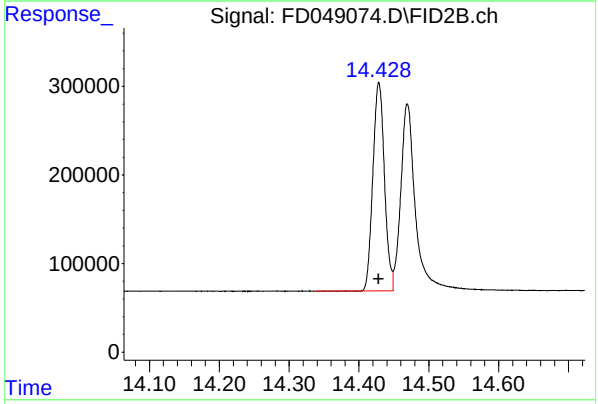
R.T.: 12.267 min
Delta R.T.: 0.000 min
Response: 3071055
Conc: 20.00 ug/ml




#13 Pyrene (C20.8)

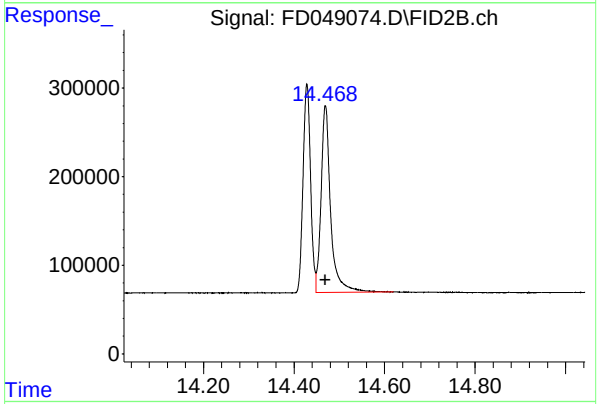
R.T.: 12.558 min
Delta R.T.: 0.000 min
Response: 3015302
Conc: 20.00 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD3



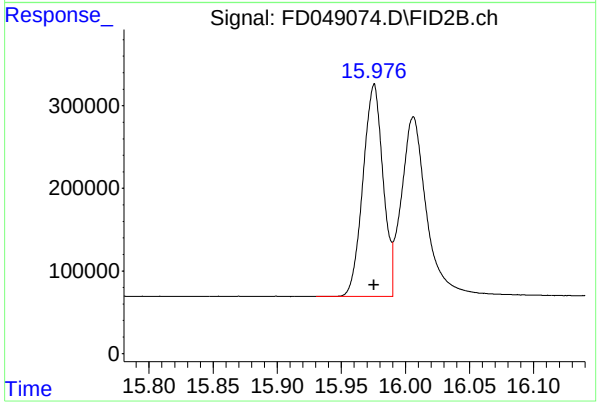

#14 Benzo[a]anthracene (C26.37)

R.T.: 14.429 min
Delta R.T.: 0.000 min
Response: 2705035
Conc: 20.00 ug/ml



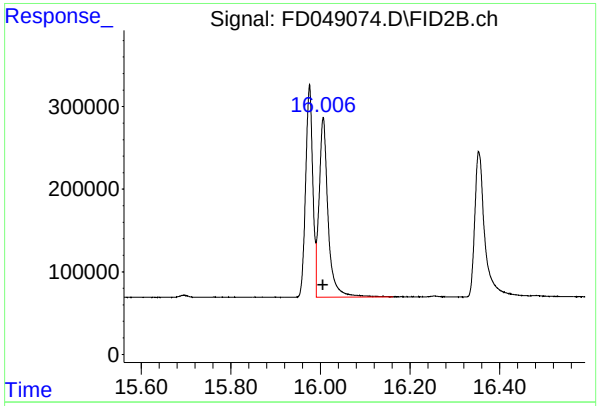

#15 Chrysene (C27.41)

R.T.: 14.469 min
Delta R.T.: 0.000 min
Response: 3106970
Conc: 20.00 ug/ml




#16 benzo[b]fluoranthene (C30.41)

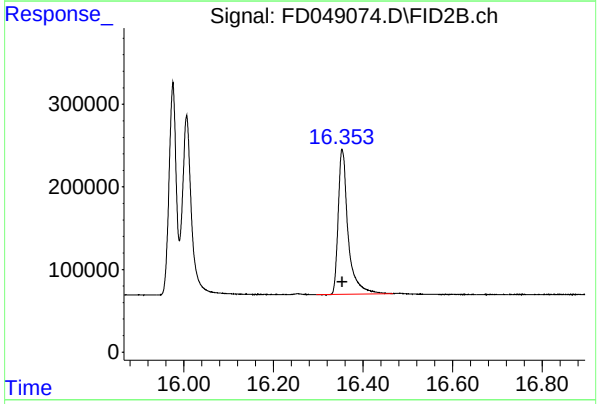
R.T.: 15.976 min
Delta R.T.: 0.000 min
Response: 2807258
Conc: 20.00 ug/ml




#17 Bnezo[k]fluoranthene (C30.14)

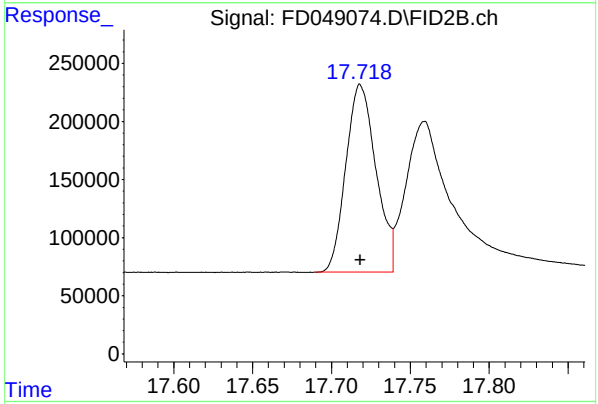
R.T.: 16.006 min
Delta R.T.: 0.000 min
Response: 3041925
Conc: 20.00 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD3



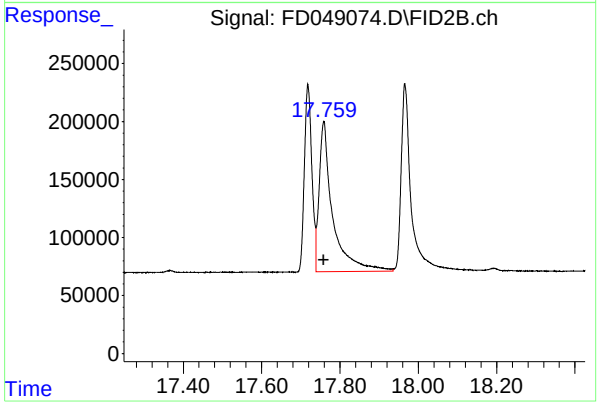

#18 Benzo[a]pyrene (C31.34)

R.T.: 16.354 min
Delta R.T.: 0.000 min
Response: 2685830
Conc: 20.00 ug/ml



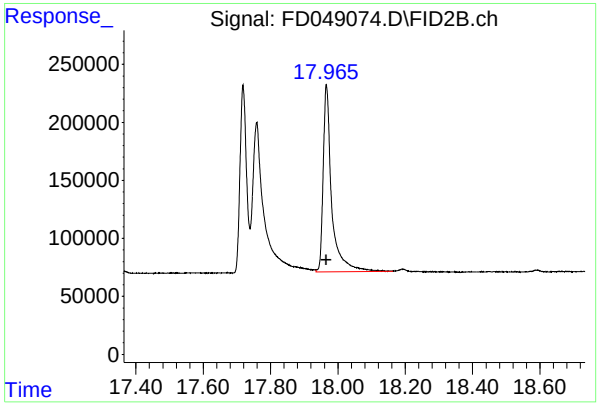

#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.718 min
Delta R.T.: 0.000 min
Response: 2142662
Conc: 20.00 ug/ml




#20 Dibenz[a,h]anthracene (C30.36)

R.T.: 17.759 min
Delta R.T.: 0.000 min
Response: 3107681
Conc: 20.00 ug/ml




#21 Benzo[g,h,i]perylene (C34.01)

R.T.: 17.966 min
Delta R.T.: 0.000 mi
Response: 2831461
Conc: 20.00 ug/m

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD3

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD021125AR\
Data File : FD049074.D
Signal(s) : FID2B.ch
Acq On : 10 Feb 2025 14:35
Sample : 20 PPM AROMATIC HC STD3
Misc :
ALS Vial : 64 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Title : GC Extractables

Signal : FID2B.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 4.176 | 4.130 | 4.290 | BB | 341507 | 3122576 | 97.35% | 5.101% |
| 2 | 5.693 | 5.615 | 5.850 | BB | 302052 | 3140580 | 97.91% | 5.131% |
| 3 | 6.739 | 6.702 | 6.875 | PV | 276834 | 3103501 | 96.76% | 5.070% |
| 4 | 7.351 | 7.295 | 7.504 | BB | 268948 | 2836644 | 88.44% | 4.634% |
| 5 | 8.003 | 7.960 | 8.127 | BB | 296889 | 3196723 | 99.66% | 5.222% |
| 6 | 8.202 | 8.150 | 8.270 | BV | 149509 | 1780140 | 55.50% | 2.908% |
| 7 | 8.296 | 8.270 | 8.409 | VB | 315086 | 3207497 | 100.00% | 5.240% |
| 8 | 9.076 | 8.987 | 9.244 | BB | 264582 | 3127465 | 97.50% | 5.109% |
| 9 | 10.463 | 10.350 | 10.515 | BV | 283529 | 2993262 | 93.32% | 4.890% |
| 10 | 10.540 | 10.515 | 10.737 | VB | 225555 | 3009407 | 93.82% | 4.916% |
| 11 | 11.233 | 11.175 | 11.324 | BB | 295969 | 3179603 | 99.13% | 5.194% |
| 12 | 12.267 | 12.235 | 12.412 | PB | 247743 | 3071055 | 95.75% | 5.017% |
| 13 | 12.558 | 12.510 | 12.635 | PV | 244074 | 3015302 | 94.01% | 4.926% |
| 14 | 14.429 | 14.339 | 14.449 | BV | 235372 | 2705035 | 84.33% | 4.419% |
| 15 | 14.469 | 14.449 | 14.619 | VB | 210710 | 3106970 | 96.87% | 5.076% |
| 16 | 15.976 | 15.930 | 15.990 | BV | 256347 | 2807258 | 87.52% | 4.586% |
| 17 | 16.006 | 15.990 | 16.162 | VB | 217937 | 3041925 | 94.84% | 4.969% |
| 18 | 16.354 | 16.295 | 16.467 | BV | 175364 | 2685830 | 83.74% | 4.388% |
| 19 | 17.718 | 17.690 | 17.739 | BV | 161338 | 2142662 | 66.80% | 3.500% |
| 20 | 17.759 | 17.739 | 17.935 | VV | 129645 | 3107681 | 96.89% | 5.077% |
| 21 | 17.966 | 17.935 | 18.164 | VV | 161614 | 2831461 | 88.28% | 4.626% |

Sum of corrected areas: 61212576

Aromatic EPH 021125.M Tue Feb 11 00:33:40 2025

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

| | | | |
|---|---|---|---|
| Lab Sample ID: | 10 PPM AROMATIC HC S | Acq On: | 10 Feb 2025 15:12 |
| Client Sample ID: | | Operator: | YP/AJ |
| Data file: | FD049075.D | Misc: | |
| Instrument: | FID_D | ALS Vial: | 65 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | Units |
|---|---|---|---|---|---|
| Aromatic C10-C12 | 4.075 | 5.793 | 3318077.000 | 20.000 | ug/ml |
| Aromatic C12-C16 | 5.794 | 8.396 | 5041964.000 | 30.000 | ug/ml |
| Aromatic C16-C21 | 8.397 | 12.658 | 6295751.000 | 40.000 | ug/ml |
| Aromatic C21-C36 | 12.659 | 18.067 | 13225172.000 | 90.000 | ug/ml |
| Aromatic EPH | 4.075 | 18.067 | 27880964.000 | 180.000 | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD021125AR\
Data File : FD049075.D
Signal(s) : FID2B.ch
Acq On : 10 Feb 2025 15:12
Operator : YP/AJ
Sample : 10 PPM AROMATIC HC STD4
Misc :
ALS Vial : 65 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
10 PPM AROMATIC HC STD4

Integration File: autoint1.e
Quant Time: Feb 10 15:56:48 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Mon Feb 10 15:56:39 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

| | Compound | R.T. | Response | Conc | Units |
|---|---|---|---|---|---|
| | **System Monitoring Compounds** | | | | |
| 4) | S 2-Bromonaphthalene (S... | 7.353 | 1471043 | 10.492 | ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 20.98% | |
| 6) | S 2-Flurobiphenyl (SURR) | 8.207 | 875829 | 9.805 | ug/ml |
| Spiked Amount | 50.000 Range 0 - 131 | | Recovery = | 19.61% | |
| 11) | S ortho-Terphenyl (SURR) | 11.234 | 1694149 | 10.763 | ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 21.53% | |
| | **Target Compounds** | | | | |
| 1) | T 1,2,3-Trimethylbenzen... | 4.177 | 1656548 | 10.685 | ug/ml |
| 2) | T Naphthalene (C11.7) | 5.695 | 1661529 | 10.548 | ug/ml |
| 3) | T 2-Methylnaphthalene (... | 6.741 | 1621317 | 10.517 | ug/ml |
| 5) | T Acenaphthylene (C15.06) | 8.005 | 1694814 | 10.673 | ug/ml |
| 7) | T Acenaphthene (C15.5) | 8.297 | 1725833 | 10.888 | ug/ml |
| 8) | T Flouorene (C16.55) | 9.079 | 1621856 | 10.458 | ug/ml |
| 9) | T Phenanthrene (C19.36) | 10.465 | 1539045 | 10.316 | ug/ml |
| 10) | T Anthracene (C19.43) | 10.542 | 1567931 | 10.490 | ug/ml |
| 12) | T Fluoranthene (C21.85) | 12.271 | 1592182 | 10.481 | ug/ml |
| 13) | T Pyrene (C20.8) | 12.562 | 1566919 | 10.430 | ug/ml |
| 14) | T Benzo[a]anthracene (C... | 14.431 | 1271690 | 9.418 | ug/ml |
| 15) | T Chrysene (C27.41) | 14.471 | 1725375 | 11.239 | ug/ml |
| 16) | T benzo[b]fluoranthene ... | 15.977 | 1376748 | 9.922 | ug/ml |
| 17) | T Bnezo[k]fluoranthene ... | 16.009 | 1686985 | 11.222 | ug/ml |
| 18) | T Benzo[a]pyrene (C31.34) | 16.362 | 1358701 | 10.188 | ug/ml |
| 19) | T Indeno[1,2,3-cd]pyren... | 17.728 | 1005197 | 8.910 | ug/ml |
| 20) | T Dibenz[a,h]anthracene... | 17.771 | 1692264 | 11.355 | ug/ml |
| 21) | T Benzo[g,h,i]perylene ... | 17.973 | 1516030 | 10.775 | ug/ml |

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

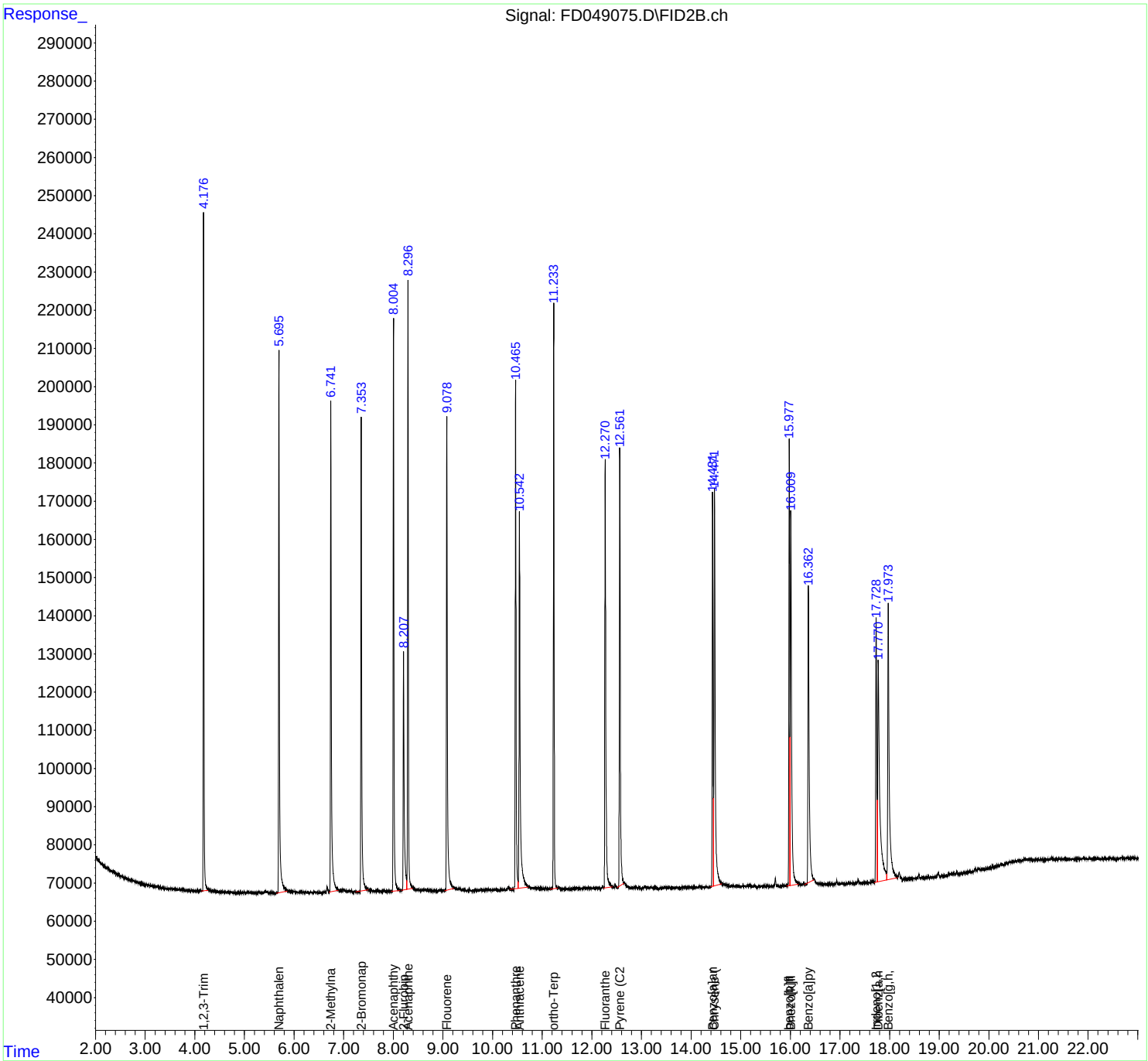
Quantitation Report (QT Reviewed)

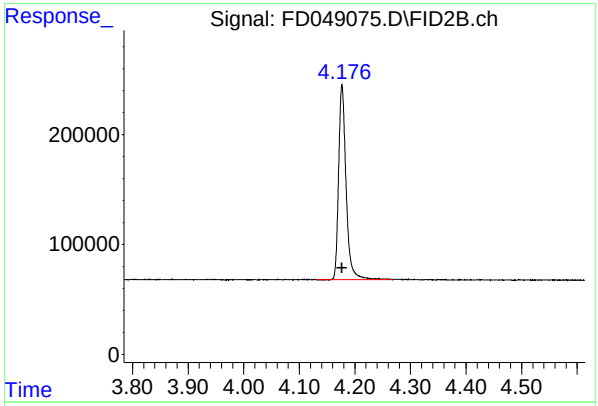
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD021125AR\
Data File : FD049075.D
Signal(s) : FID2B.ch
Acq On : 10 Feb 2025 15:12
Operator : YP/AJ
Sample : 10 PPM AROMATIC HC STD4
Misc :
ALS Vial : 65 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
10 PPM AROMATIC HC STD4

Integration File: autoint1.e
Quant Time: Feb 10 15:56:48 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Mon Feb 10 15:56:39 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

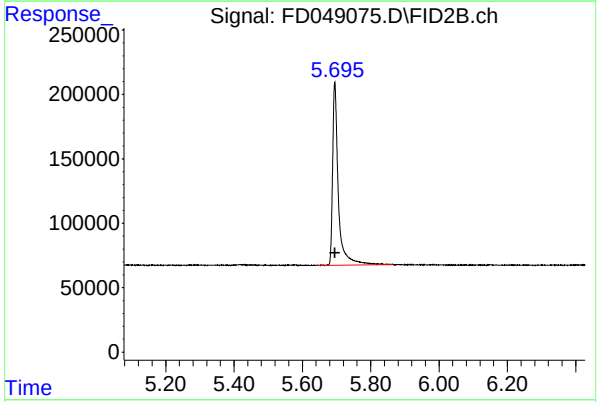





#1 1,2,3-Trimethylbenzene (C10.1)

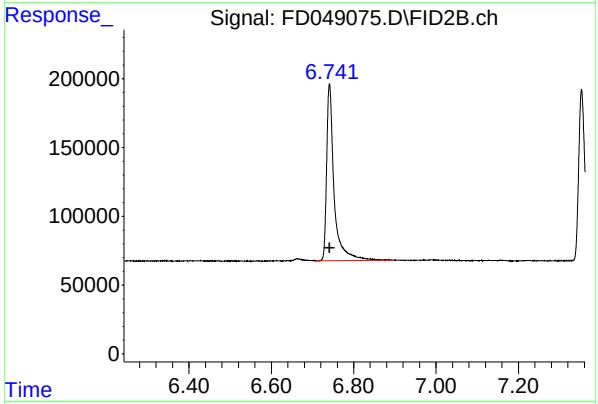
R.T.: 4.177 min
Delta R.T.: 0.000 min
Response: 1656548
Conc: 10.69 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
10 PPM AROMATIC HC STD4



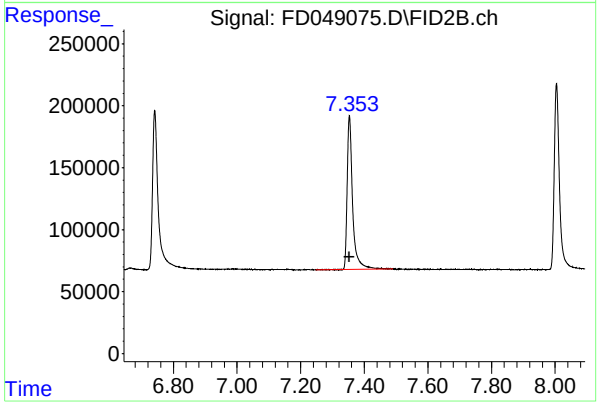

#2 Naphthalene (C11.7)

R.T.: 5.695 min
Delta R.T.: 0.000 min
Response: 1661529
Conc: 10.55 ug/ml



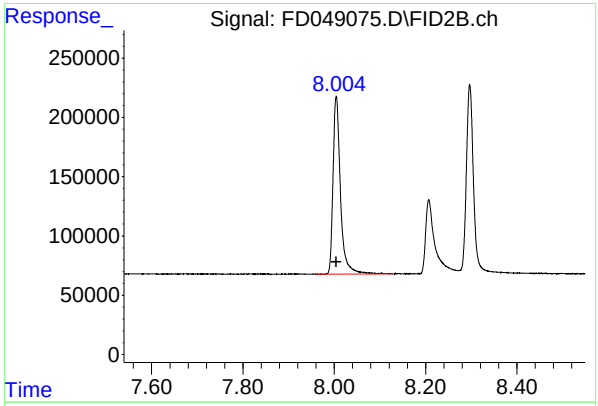

#3 2-Methylnaphthalene (C12.89)

R.T.: 6.741 min
Delta R.T.: 0.000 min
Response: 1621317
Conc: 10.52 ug/ml




#4 2-Bromonaphthalene (SURR)

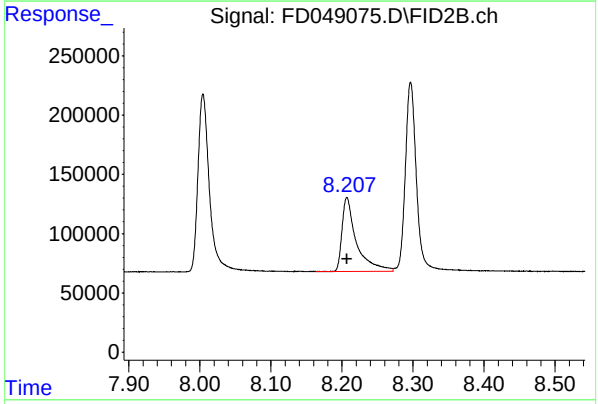
R.T.: 7.353 min
Delta R.T.: 0.000 min
Response: 1471043
Conc: 10.49 ug/ml




#5 Acenaphthylene (C15.06)

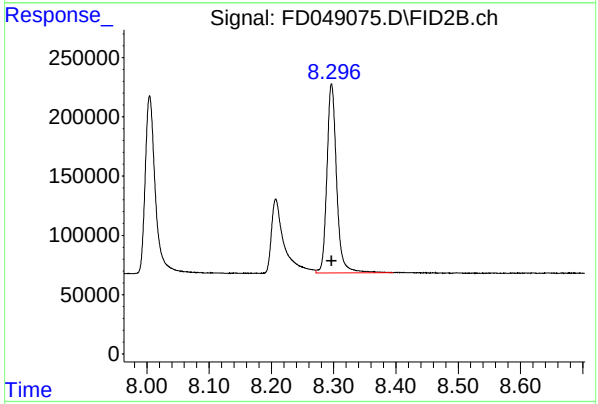
R.T.: 8.005 min
Delta R.T.: 0.000 min
Response: 1694814
Conc: 10.67 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
10 PPM AROMATIC HC STD4



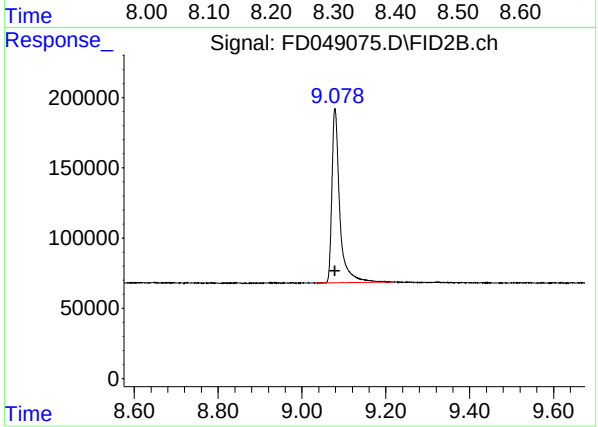

#6 2-Flurobiphenyl (SURR)

R.T.: 8.207 min
Delta R.T.: 0.000 min
Response: 875829
Conc: 9.81 ug/ml



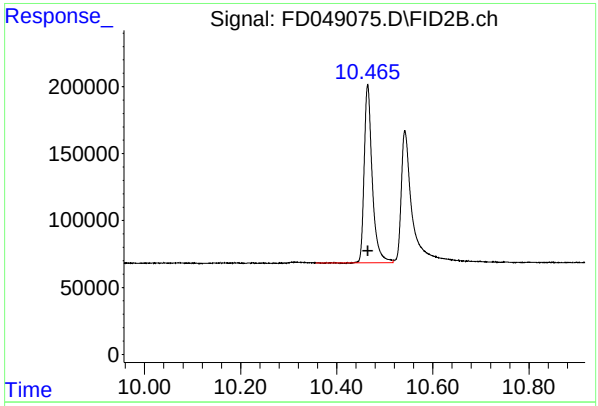

#7 Acenaphthene (C15.5)

R.T.: 8.297 min
Delta R.T.: 0.000 min
Response: 1725833
Conc: 10.89 ug/ml




#8 Flouorene (C16.55)

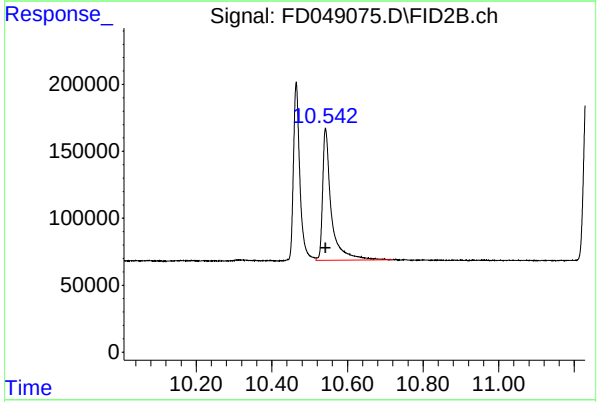
R.T.: 9.079 min
Delta R.T.: 0.000 min
Response: 1621856
Conc: 10.46 ug/ml




#9 Phenanthrene (C19.36)

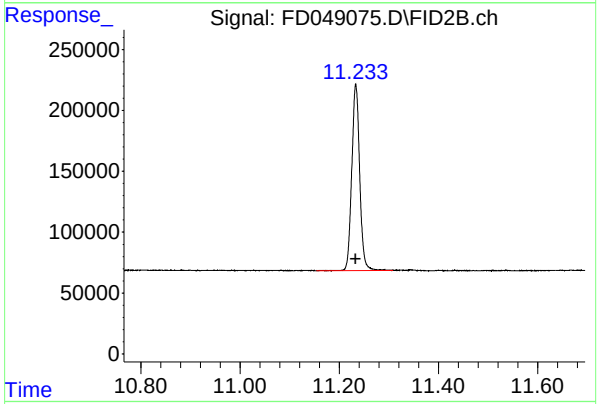
R.T.: 10.465 min
Delta R.T.: 0.000 min
Response: 1539045
Conc: 10.32 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
10 PPM AROMATIC HC STD4



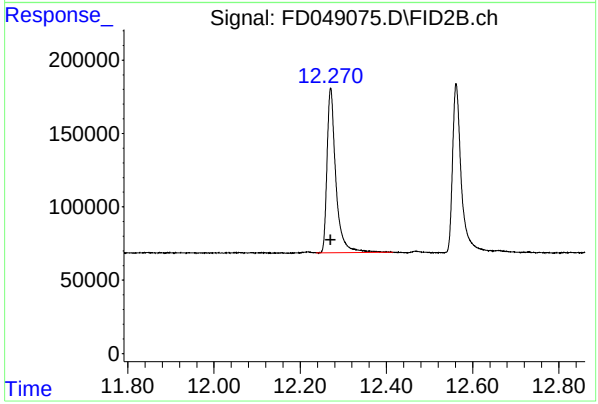

#10 Anthracene (C19.43)

R.T.: 10.542 min
Delta R.T.: 0.000 min
Response: 1567931
Conc: 10.49 ug/ml



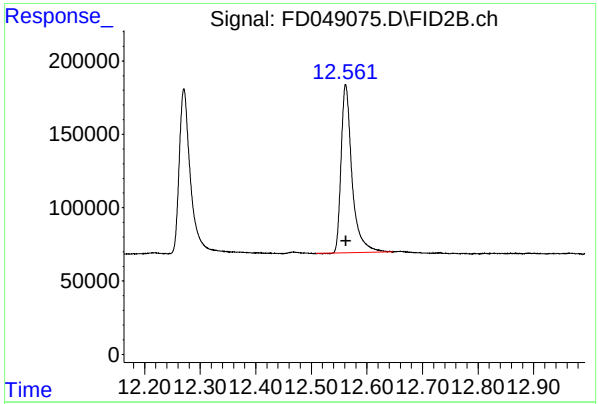

#11 ortho-Terphenyl (SURR)

R.T.: 11.234 min
Delta R.T.: 0.000 min
Response: 1694149
Conc: 10.76 ug/ml




#12 Fluoranthene (C21.85)

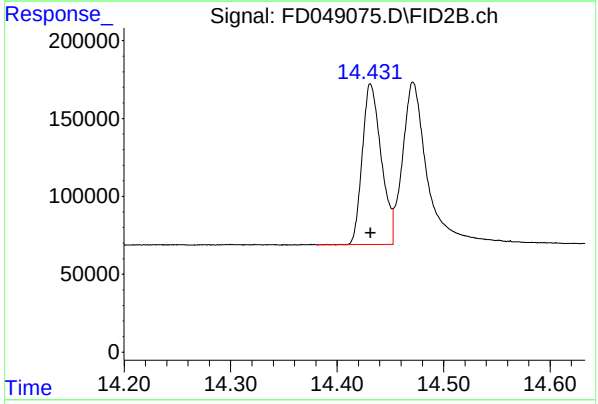
R.T.: 12.271 min
Delta R.T.: 0.000 min
Response: 1592182
Conc: 10.48 ug/ml




#13 Pyrene (C20.8)

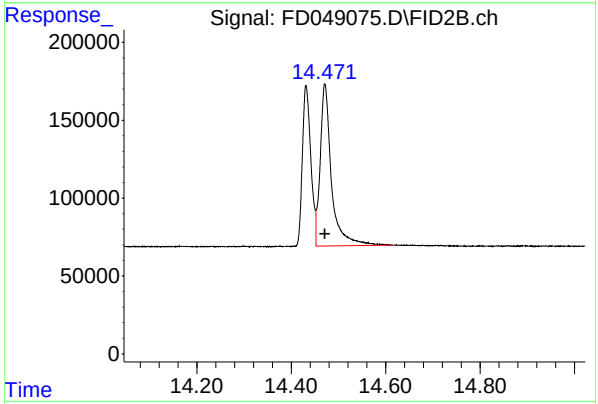
R.T.: 12.562 min
Delta R.T.: 0.000 min
Response: 1566919
Conc: 10.43 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
10 PPM AROMATIC HC STD4



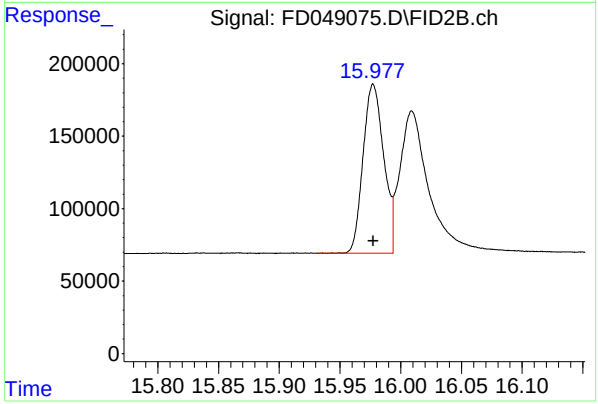

#14 Benzo[a]anthracene (C26.37)

R.T.: 14.431 min
Delta R.T.: 0.000 min
Response: 1271690
Conc: 9.42 ug/ml



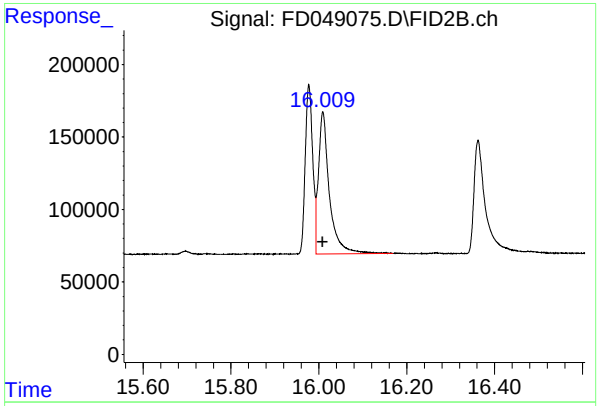

#15 Chrysene (C27.41)

R.T.: 14.471 min
Delta R.T.: 0.000 min
Response: 1725375
Conc: 11.24 ug/ml




#16 benzo[b]fluoranthene (C30.41)

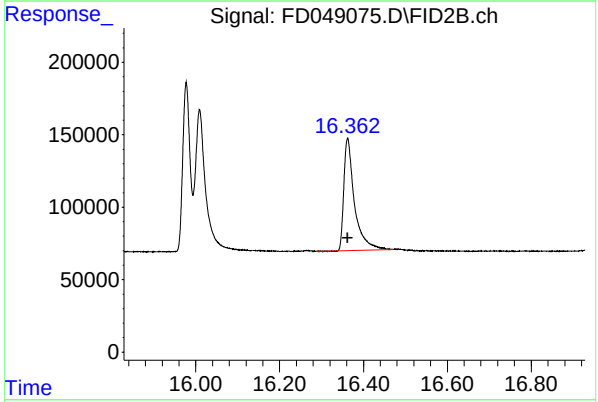
R.T.: 15.977 min
Delta R.T.: 0.000 min
Response: 1376748
Conc: 9.92 ug/ml




#17 Bnezo[k]fluoranthene (C30.14)

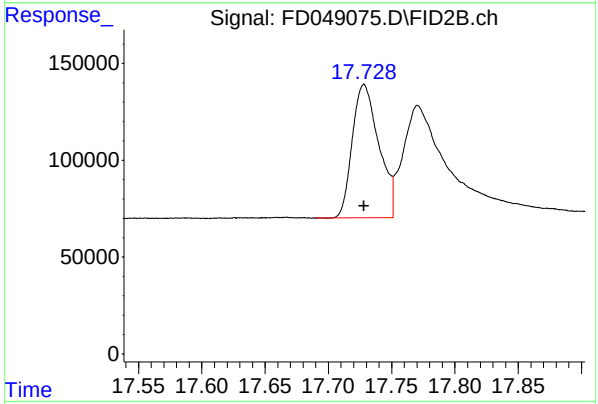
R.T.: 16.009 min
Delta R.T.: 0.000 min
Response: 1686985
Conc: 11.22 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
10 PPM AROMATIC HC STD4



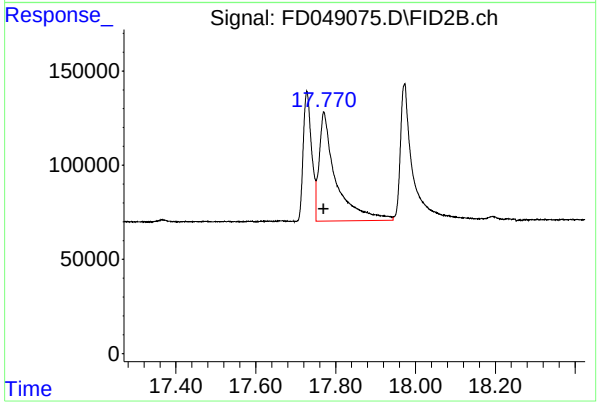

#18 Benzo[a]pyrene (C31.34)

R.T.: 16.362 min
Delta R.T.: 0.000 min
Response: 1358701
Conc: 10.19 ug/ml



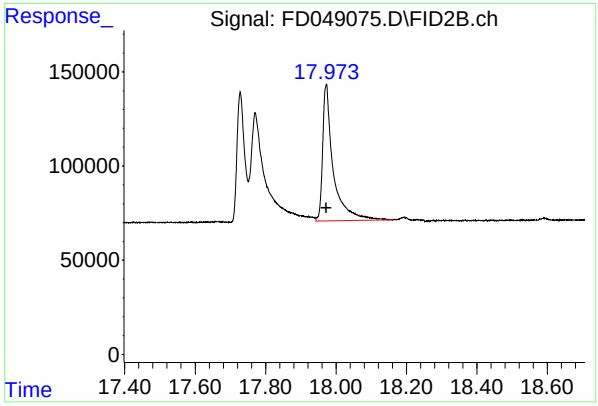

#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.728 min
Delta R.T.: 0.000 min
Response: 1005197
Conc: 8.91 ug/ml




#20 Dibenz[a,h]anthracene (C30.36)

R.T.: 17.771 min
Delta R.T.: 0.000 min
Response: 1692264
Conc: 11.35 ug/ml




#21 Benzo[g,h,i]perylene (C34.01)

R.T.: 17.973 min
Delta R.T.: 0.000 mi
Response: 1516030
Conc: 10.78 ug/m

**Instrument :**
FID_D
**ClientSampleId :**
10 PPM AROMATIC HC STD4

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD021125AR\
Data File : FD049075.D
Signal(s) : FID2B.ch
Acq On : 10 Feb 2025 15:12
Sample : 10 PPM AROMATIC HC STD4
Misc :
ALS Vial : 65 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Title : GC Extractables

Signal : FID2B.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 4.177 | 4.130 | 4.269 | BV | 177205 | 1656548 | 95.99% | 5.189% |
| 2 | 5.695 | 5.640 | 5.865 | BB | 141933 | 1661529 | 96.27% | 5.205% |
| 3 | 6.741 | 6.709 | 6.895 | BB | 128539 | 1621317 | 93.94% | 5.079% |
| 4 | 7.353 | 7.249 | 7.490 | BB | 124068 | 1471043 | 85.24% | 4.608% |
| 5 | 8.005 | 7.960 | 8.129 | BB | 150103 | 1694814 | 98.20% | 5.309% |
| 6 | 8.207 | 8.164 | 8.272 | BV | 62427 | 875829 | 50.75% | 2.744% |
| 7 | 8.297 | 8.272 | 8.395 | VB | 159429 | 1725833 | 100.00% | 5.406% |
| 8 | 9.079 | 9.034 | 9.217 | BB | 124112 | 1621856 | 93.98% | 5.081% |
| 9 | 10.465 | 10.357 | 10.517 | BV | 133260 | 1539045 | 89.18% | 4.821% |
| 10 | 10.542 | 10.517 | 10.720 | VB | 98455 | 1567931 | 90.85% | 4.912% |
| 11 | 11.234 | 11.154 | 11.309 | BB | 153221 | 1694149 | 98.16% | 5.307% |
| 12 | 12.271 | 12.237 | 12.415 | BB | 112182 | 1592182 | 92.26% | 4.988% |
| 13 | 12.562 | 12.509 | 12.647 | BV | 114740 | 1566919 | 90.79% | 4.909% |
| 14 | 14.431 | 14.380 | 14.452 | BV | 102861 | 1271690 | 73.69% | 3.984% |
| 15 | 14.471 | 14.452 | 14.615 | VB | 104040 | 1725375 | 99.97% | 5.405% |
| 16 | 15.977 | 15.930 | 15.994 | BV | 116644 | 1376748 | 79.77% | 4.313% |
| 17 | 16.009 | 15.994 | 16.169 | VB | 98055 | 1686985 | 97.75% | 5.285% |
| 18 | 16.362 | 16.287 | 16.470 | BV | 77646 | 1358701 | 78.73% | 4.256% |
| 19 | 17.728 | 17.690 | 17.751 | BV | 69162 | 1005197 | 58.24% | 3.149% |
| 20 | 17.771 | 17.751 | 17.944 | VV | 57989 | 1692264 | 98.05% | 5.301% |
| 21 | 17.973 | 17.944 | 18.162 | VV | 72731 | 1516030 | 87.84% | 4.749% |
| | | | Sum of corrected areas: | | | 31921984 | | |

Aromatic EPH 021125.M Tue Feb 11 00:33:53 2025

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

| | | | |
|---|---|---|---|
| Lab Sample ID: | 5 PPM AROMATIC HC S | Acq On: | 10 Feb 2025 15:48 |
| Client Sample ID: | | Operator: | YP/AJ |
| Data file: | FD049076.D | Misc: | |
| Instrument: | FID_D | ALS Vial: | 66 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | Units |
|---|---|---|---|---|---|
| Aromatic C10-C12 | 4.075 | 5.793 | 1700032.000 | 10.000 | ug/ml |
| Aromatic C12-C16 | 5.794 | 8.396 | 2641021.000 | 15.000 | ug/ml |
| Aromatic C16-C21 | 8.397 | 12.658 | 3256475.000 | 20.000 | ug/ml |
| Aromatic C21-C36 | 12.659 | 18.067 | 6892110.000 | 45.000 | ug/ml |
| Aromatic EPH | 4.075 | 18.067 | 14489638.000 | 90.000 | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD021125AR\
Data File : FD049076.D
Signal(s) : FID2B.ch
Acq On : 10 Feb 2025 15:48
Operator : YP/AJ
Sample : 5 PPM AROMATIC HC STD5
Misc :
ALS Vial : 66 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
5 PPM AROMATIC HC STD5

Integration File: autoint1.e
Quant Time: Feb 10 16:26:29 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Mon Feb 10 16:26:18 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

| | Compound | R.T. | Response | Conc Units |
|---|---|---|---|---|
| | **System Monitoring Compounds** | | | |
| 4) S | 2-Bromonaphthalene (S... | 7.358 | 773691 | 5.406 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 10.81% |
| 6) S | 2-Flurobiphenyl (SURR) | 8.218 | 411369 | 4.679 ug/ml |
| Spiked Amount | 50.000 Range | 0 - 131 | Recovery = | 9.36% |
| 11) S | ortho-Terphenyl (SURR) | 11.234 | 896262 | 5.540 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 11.08% |
| | **Target Compounds** | | | |
| 1) T | 1,2,3-Trimethylbenzen... | 4.178 | 880662 | 5.530 ug/ml |
| 2) T | Naphthalene (C11.7) | 5.699 | 819370 | 5.160 ug/ml |
| 3) T | 2-Methylnaphthalene (... | 6.746 | 809055 | 5.196 ug/ml |
| 5) T | Acenaphthylene (C15.06) | 8.007 | 889357 | 5.469 ug/ml |
| 7) T | Acenaphthene (C15.5) | 8.298 | 942609 | 5.730 ug/ml |
| 8) T | Flouorene (C16.55) | 9.085 | 839593 | 5.326 ug/ml |
| 9) T | Phenanthrene (C19.36) | 10.472 | 783663 | 5.200 ug/ml |
| 10) T | Anthracene (C19.43) | 10.552 | 786469 | 5.207 ug/ml |
| 12) T | Fluoranthene (C21.85) | 12.279 | 819618 | 5.311 ug/ml |
| 13) T | Pyrene (C20.8) | 12.567 | 846750 | 5.496 ug/ml |
| 14) T | Benzo[a]anthracene (C... | 14.443 | 584303 | 4.447 ug/ml |
| 15) T | Chrysene (C27.41) | 14.479 | 971932 | 6.011 ug/ml |
| 16) T | benzo[b]fluoranthene ... | 15.986 | 664702 | 4.831 ug/ml |
| 17) T | Bnezo[k]fluoranthene ... | 16.019 | 942068 | 5.965 ug/ml |
| 18) T | Benzo[a]pyrene (C31.34) | 16.376 | 726171 | 5.350 ug/ml |
| 19) T | Indeno[1,2,3-cd]pyren... | 17.745 | 475672 | 4.353 ug/ml |
| 20) T | Dibenz[a,h]anthracene... | 17.788 | 897828 | 5.787 ug/ml |
| 21) T | Benzo[g,h,i]perylene ... | 17.982 | 809816 | 5.587 ug/ml |

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

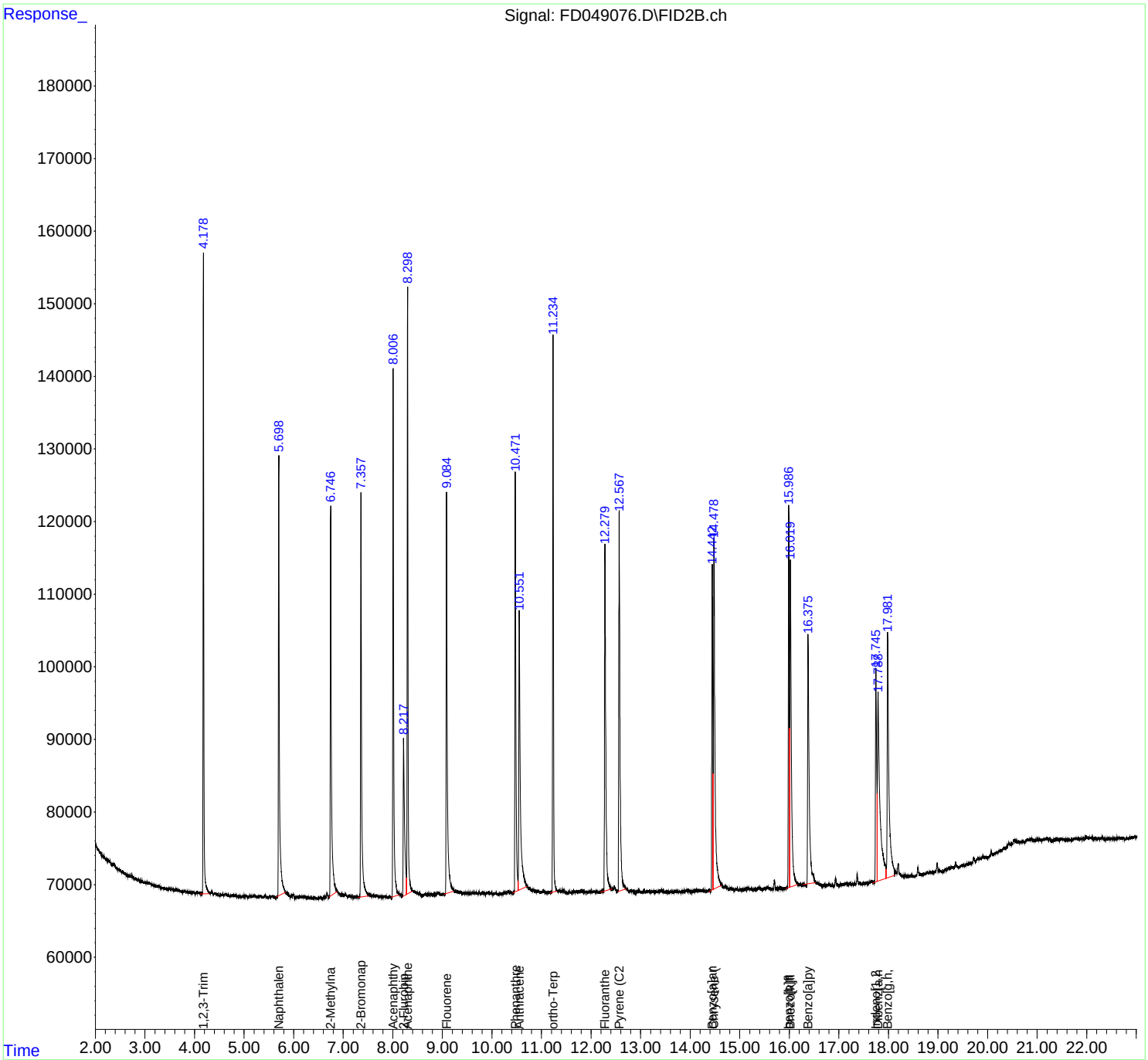
Quantitation Report (QT Reviewed)

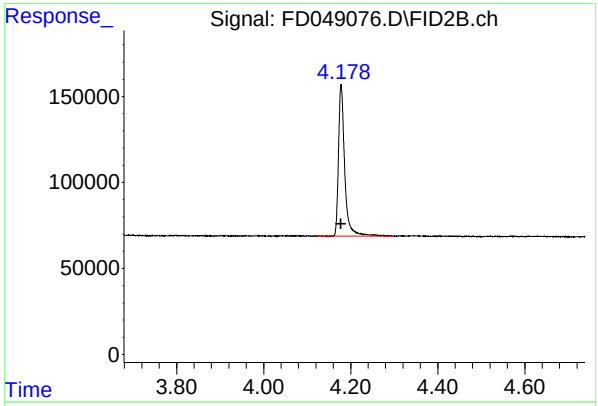
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD021125AR\
Data File : FD049076.D
Signal(s) : FID2B.ch
Acq On : 10 Feb 2025 15:48
Operator : YP/AJ
Sample : 5 PPM AROMATIC HC STD5
Misc :
ALS Vial : 66 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
5 PPM AROMATIC HC STD5

Integration File: autoint1.e
Quant Time: Feb 10 16:26:29 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Mon Feb 10 16:26:18 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

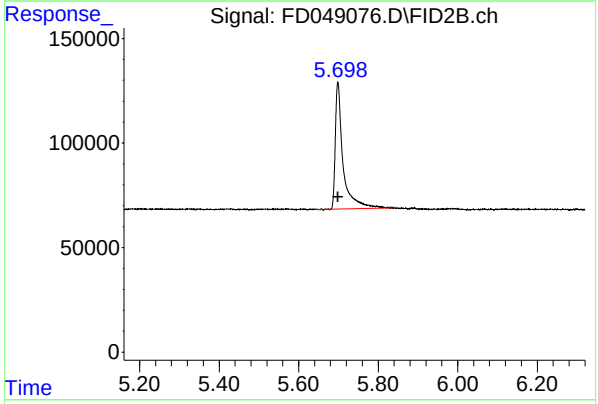





#1 1,2,3-Trimethylbenzene (C10.1)

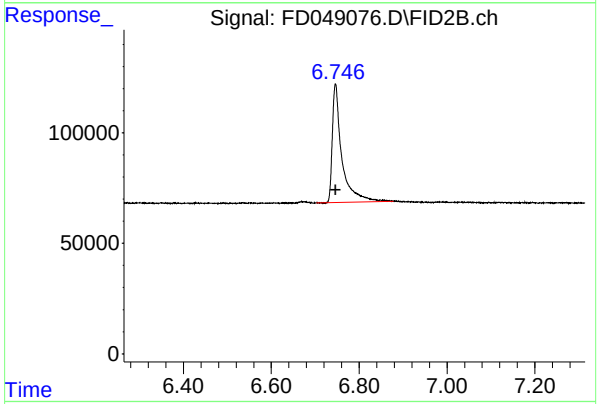
R.T.: 4.178 min
Delta R.T.: 0.000 min
Response: 880662
Conc: 5.53 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
5 PPM AROMATIC HC STD5



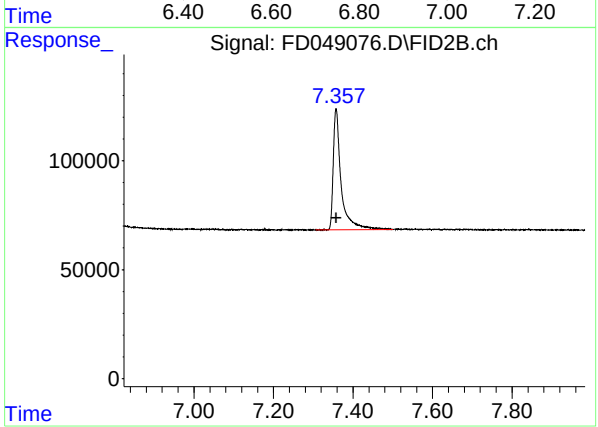

#2 Naphthalene (C11.7)

R.T.: 5.699 min
Delta R.T.: 0.000 min
Response: 819370
Conc: 5.16 ug/ml



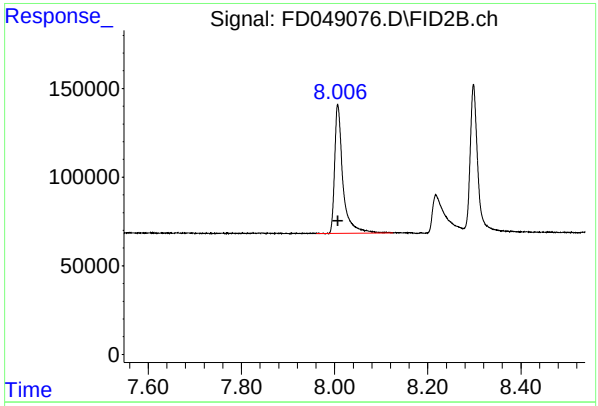

#3 2-Methylnaphthalene (C12.89)

R.T.: 6.746 min
Delta R.T.: 0.000 min
Response: 809055
Conc: 5.20 ug/ml




#4 2-Bromonaphthalene (SURR)

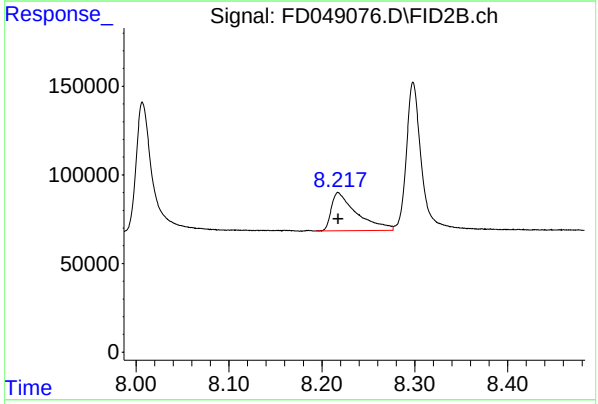
R.T.: 7.358 min
Delta R.T.: 0.000 min
Response: 773691
Conc: 5.41 ug/ml




#5 Acenaphthylene (C15.06)

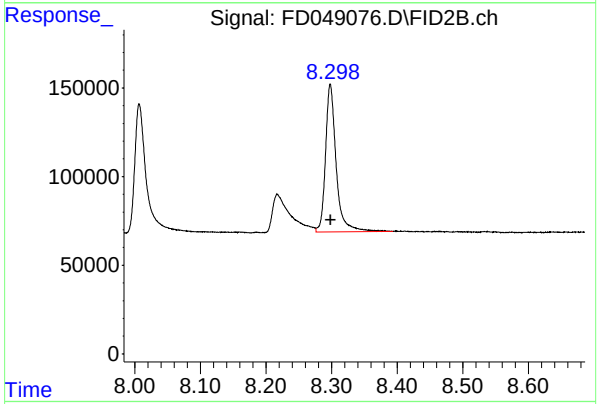
R.T.: 8.007 min
Delta R.T.: 0.000 min
Response: 889357
Conc: 5.47 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
5 PPM AROMATIC HC STD5



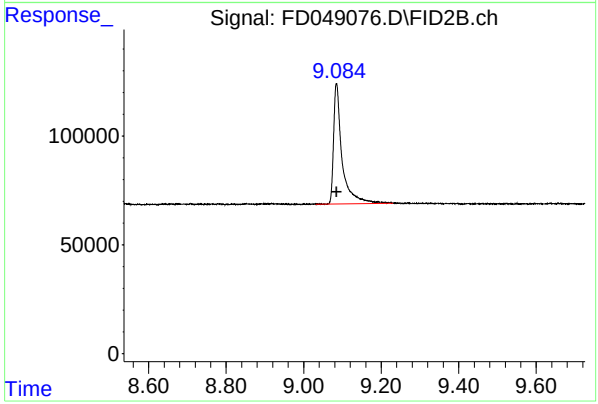

#6 2-Flurobiphenyl (SURR)

R.T.: 8.218 min
Delta R.T.: 0.000 min
Response: 411369
Conc: 4.68 ug/ml



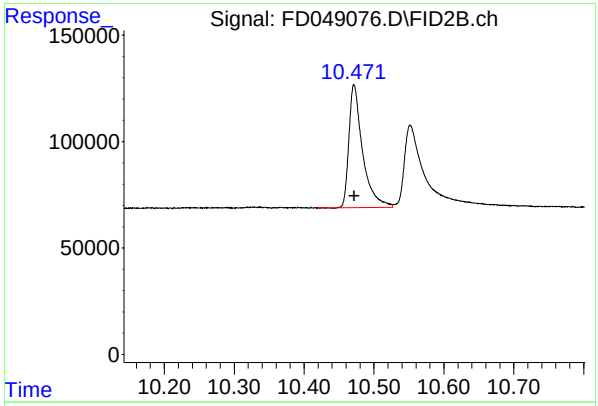

#7 Acenaphthene (C15.5)

R.T.: 8.298 min
Delta R.T.: 0.000 min
Response: 942609
Conc: 5.73 ug/ml




#8 Flouorene (C16.55)

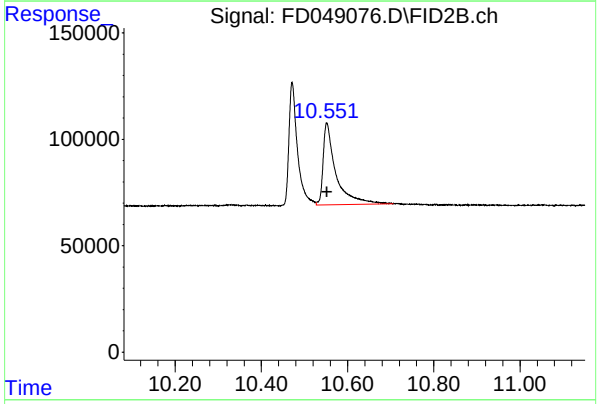
R.T.: 9.085 min
Delta R.T.: 0.000 min
Response: 839593
Conc: 5.33 ug/ml




#9 Phenanthrene (C19.36)

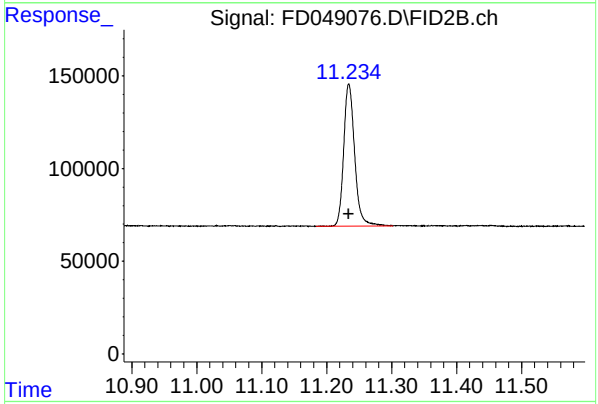
R.T.: 10.472 min
Delta R.T.: 0.000 min
Response: 783663
Conc: 5.20 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
5 PPM AROMATIC HC STD5



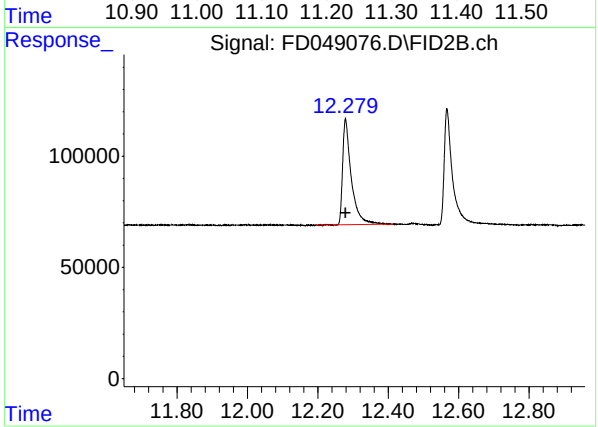

#10 Anthracene (C19.43)

R.T.: 10.552 min
Delta R.T.: 0.000 min
Response: 786469
Conc: 5.21 ug/ml



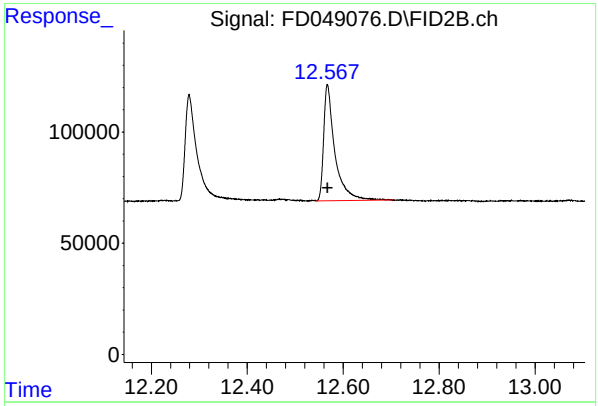

#11 ortho-Terphenyl (SURR)

R.T.: 11.234 min
Delta R.T.: 0.000 min
Response: 896262
Conc: 5.54 ug/ml




#12 Fluoranthene (C21.85)

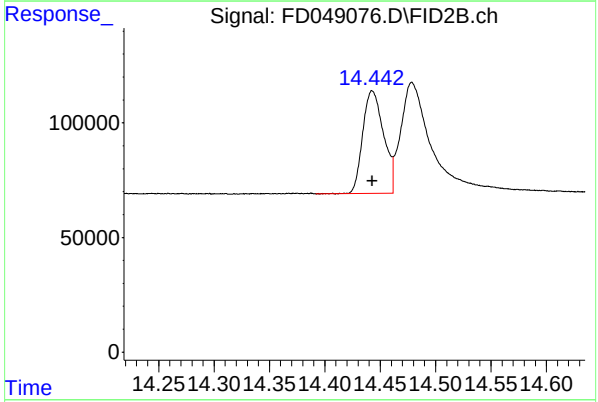
R.T.: 12.279 min
Delta R.T.: 0.000 min
Response: 819618
Conc: 5.31 ug/ml




#13 Pyrene (C20.8)

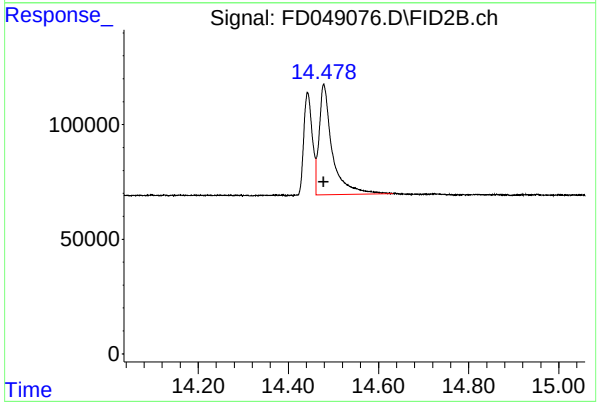
R.T.: 12.567 min
Delta R.T.: 0.000 min
Response: 846750
Conc: 5.50 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
5 PPM AROMATIC HC STD5



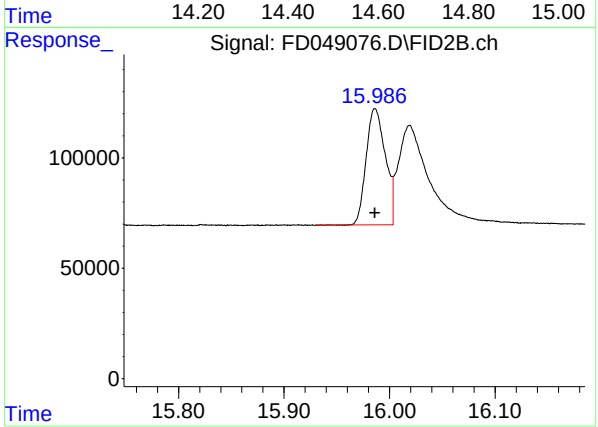

#14 Benzo[a]anthracene (C26.37)

R.T.: 14.443 min
Delta R.T.: 0.000 min
Response: 584303
Conc: 4.45 ug/ml



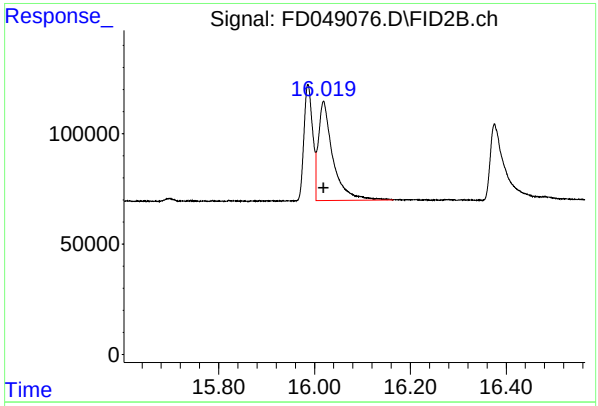

#15 Chrysene (C27.41)

R.T.: 14.479 min
Delta R.T.: 0.000 min
Response: 971932
Conc: 6.01 ug/ml




#16 benzo[b]fluoranthene (C30.41)

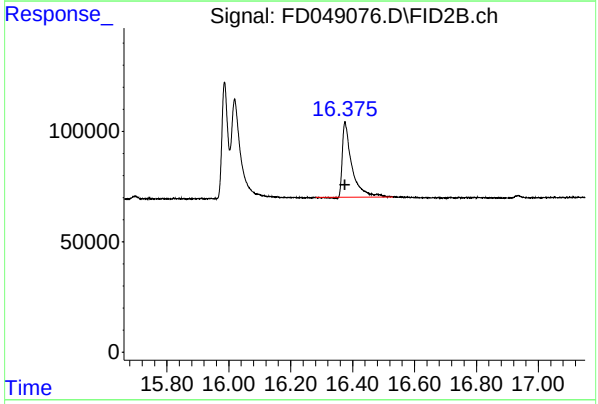
R.T.: 15.986 min
Delta R.T.: 0.000 min
Response: 664702
Conc: 4.83 ug/ml




#17 Bnezo[k]fluoranthene (C30.14)

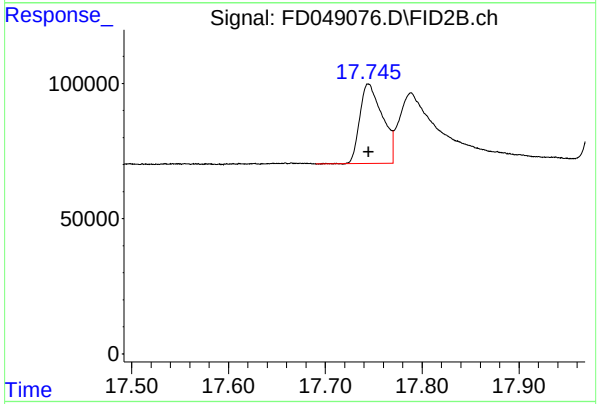
R.T.: 16.019 min
Delta R.T.: 0.000 min
Response: 942068
Conc: 5.96 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
5 PPM AROMATIC HC STD5



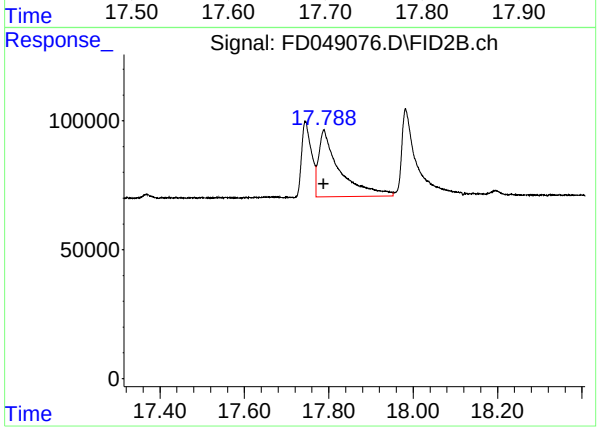

#18 Benzo[a]pyrene (C31.34)

R.T.: 16.376 min
Delta R.T.: 0.000 min
Response: 726171
Conc: 5.35 ug/ml



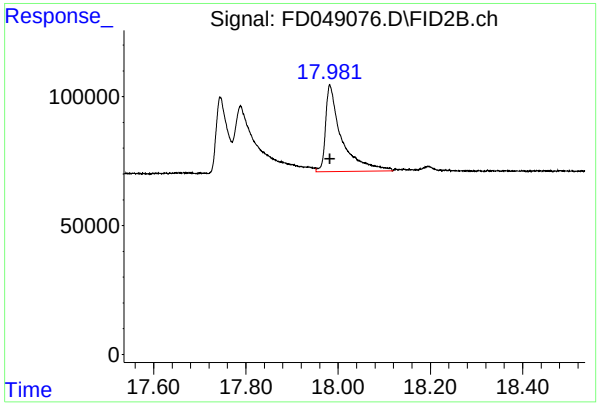

#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.745 min
Delta R.T.: 0.000 min
Response: 475672
Conc: 4.35 ug/ml




#20 Dibenz[a,h]anthracene (C30.36)

R.T.: 17.788 min
Delta R.T.: 0.000 min
Response: 897828
Conc: 5.79 ug/ml




#21 Benzo[g,h,i]perylene (C34.01)

R.T.: 17.982 min
Delta R.T.: 0.000 mi
Response: 809816
Conc: 5.59 ug/m

**Instrument :**
FID_D
**ClientSampleId :**
5 PPM AROMATIC HC STD5

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD021125AR\
Data File : FD049076.D
Signal(s) : FID2B.ch
Acq On : 10 Feb 2025 15:48
Sample : 5 PPM AROMATIC HC STD5
Misc :
ALS Vial : 66 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Title : GC Extractables

Signal : FID2B.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 4.178 | 4.120 | 4.297 | BB | 88104 | 880662 | 90.61% | 5.314% |
| 2 | 5.699 | 5.644 | 5.837 | BB | 60647 | 819370 | 84.30% | 4.945% |
| 3 | 6.746 | 6.702 | 6.877 | BB | 53740 | 809055 | 83.24% | 4.882% |
| 4 | 7.358 | 7.307 | 7.500 | BV | 55653 | 773691 | 79.60% | 4.669% |
| 5 | 8.007 | 7.960 | 8.125 | BB | 72554 | 889357 | 91.50% | 5.367% |
| 6 | 8.218 | 8.194 | 8.276 | PV | 21681 | 411369 | 42.32% | 2.482% |
| 7 | 8.298 | 8.276 | 8.394 | VB | 83456 | 942609 | 96.98% | 5.688% |
| 8 | 9.085 | 9.032 | 9.230 | BB | 55303 | 839593 | 86.38% | 5.067% |
| 9 | 10.472 | 10.417 | 10.527 | BV | 57501 | 783663 | 80.63% | 4.729% |
| 10 | 10.552 | 10.527 | 10.705 | VB | 38447 | 786469 | 80.92% | 4.746% |
| 11 | 11.234 | 11.184 | 11.302 | BB | 76762 | 896262 | 92.21% | 5.409% |
| 12 | 12.279 | 12.195 | 12.414 | BB | 47695 | 819618 | 84.33% | 4.946% |
| 13 | 12.567 | 12.543 | 12.704 | PB | 52249 | 846750 | 87.12% | 5.110% |
| 14 | 14.443 | 14.392 | 14.461 | BV | 44649 | 584303 | 60.12% | 3.526% |
| 15 | 14.479 | 14.461 | 14.632 | VB | 48318 | 971932 | 100.00% | 5.865% |
| 16 | 15.986 | 15.930 | 16.003 | BV | 52690 | 664702 | 68.39% | 4.011% |
| 17 | 16.019 | 16.003 | 16.164 | VB | 44953 | 942068 | 96.93% | 5.685% |
| 18 | 16.376 | 16.282 | 16.530 | BB | 34288 | 726171 | 74.71% | 4.382% |
| 19 | 17.745 | 17.690 | 17.770 | BV | 29384 | 475672 | 48.94% | 2.871% |
| 20 | 17.788 | 17.770 | 17.952 | VV | 26033 | 897828 | 92.38% | 5.418% |
| 21 | 17.982 | 17.952 | 18.119 | VV | 33694 | 809816 | 83.32% | 4.887% |
| | | | Sum of corrected areas: | | | 16570960 | | |

Aromatic EPH 021125.M Tue Feb 11 00:34:06 2025

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

# Quantitation Report For Aromatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | 20 PPM AROMATIC HC S | Acq On: | 10 Feb 2025 16:24 |
| Client Sample ID: | 20 PPM AROMATIC HC S | Operator: | YP/AJ |
| Data file: | FD049077.D | Misc: | |
| Instrument: | FID_D | ALS Vial: | 67 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aromatic C10-C12 | 4.075 | 5.793 | 6281558 | 39.502 | 200 | ug/ml |
| Aromatic C12-C16 | 5.794 | 8.396 | 9479312 | 58.901 | 300 | ug/ml |
| Aromatic C16-C21 | 8.397 | 12.658 | 15178341 | 98.972 | 500 | ug/ml |
| Aromatic C21-C36 | 12.659 | 18.067 | 22474640 | 157.039 | 800 | ug/ml |
| Aromatic EPH | 4.075 | 18.067 | 53413851 | 354.414 | | ug/ml |
| ortho-Terphenyl (SURR) | 11.233 | 11.233 | 3178458 | 19.65 | | ug/ml |
| 2-Bromonaphthalene (SURR) | 7.352 | 7.352 | 2822907 | 19.73 | | ug/ml |
| 2-Flurobiphenyl (SURR) | 8.203 | 8.203 | 1781261 | 20.26 | | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD021125AR\
Data File : FD049077.D
Signal(s) : FID2B.ch
Acq On : 10 Feb 2025 16:24
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD ICV
Misc :
ALS Vial : 67 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD ICV

**Manual Integrations APPROVED**
Reviewed By :Yogesh Patel 02/11/2025
Supervised By :Ankita Jodhani 02/11/2025

Integration File: autoint1.e
Quant Time: Feb 10 18:23:28 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Mon Feb 10 16:27:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

| | Compound | R.T. | Response | Conc Units |
|---|---|---|---|---|
| | **System Monitoring Compounds** | | | |
| 4) | S 2-Bromonaphthalene (S... | 7.352 | 2822907 | 19.726 ug/ml |
| | Spiked Amount 50.000 | | Recovery = 39.45% | |
| 6) | S 2-Flurobiphenyl (SURR) | 8.203 | 1781261 | 20.262 ug/ml |
| | Spiked Amount 50.000 Range 0 - 131 | | Recovery = 40.52% | |
| 11) | S ortho-Terphenyl (SURR) | 11.233 | 3178458 | 19.647 ug/ml |
| | Spiked Amount 50.000 | | Recovery = 39.29% | |
| | **Target Compounds** | | | |
| 1) | T 1,2,3-Trimethylbenzen... | 4.176 | 3134755 | 19.684 ug/ml |
| 2) | T Naphthalene (C11.7) | 5.693 | 3146803 | 19.818 ug/ml |
| 3) | T 2-Methylnaphthalene (... | 6.739 | 3087751 | 19.832 ug/ml |
| 5) | T Acenaphthylene (C15.06) | 8.003 | 3188327 | 19.608 ug/ml |
| 7) | T Acenaphthene (C15.5) | 8.296 | 3203234 | 19.472 ug/ml |
| 8) | T Flouorene (C16.55) | 9.076 | 3106009 | 19.702 ug/ml |
| 9) | T Phenanthrene (C19.36) | 10.462 | 2995357 | 19.876 ug/ml |
| 10) | T Anthracene (C19.43) | 10.539 | 3001671 | 19.875 ug/ml |
| 12) | T Fluoranthene (C21.85) | 12.266 | 3059686 | 19.828 ug/ml |
| 13) | T Pyrene (C20.8) | 12.559 | 3015618 | 19.575 ug/ml |
| 14) | T Benzo[a]anthracene (C... | 14.428 | 2707067 | 20.603 ug/ml |
| 15) | T Chrysene (C27.41) | 14.470 | 3142097 | 19.433 ug/ml |
| 16) | T benzo[b]fluoranthene ... | 15.976 | 2807062 | 20.401 ug/ml |
| 17) | T Bnezo[k]fluoranthene ... | 16.007 | 3031459 | 19.193 ug/ml |
| 18) | T Benzo[a]pyrene (C31.34) | 16.354 | 2694826 | 19.853 ug/ml |
| 19) | T Indeno[1,2,3-cd]pyren... | 17.718 | 2162922 | 19.793 ug/mlm |
| 20) | T Dibenz[a,h]anthracene... | 17.759 | 3098291 | 19.971 ug/ml |
| 21) | T Benzo[g,h,i]perylene ... | 17.967 | 2849147 | 19.656 ug/ml |

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

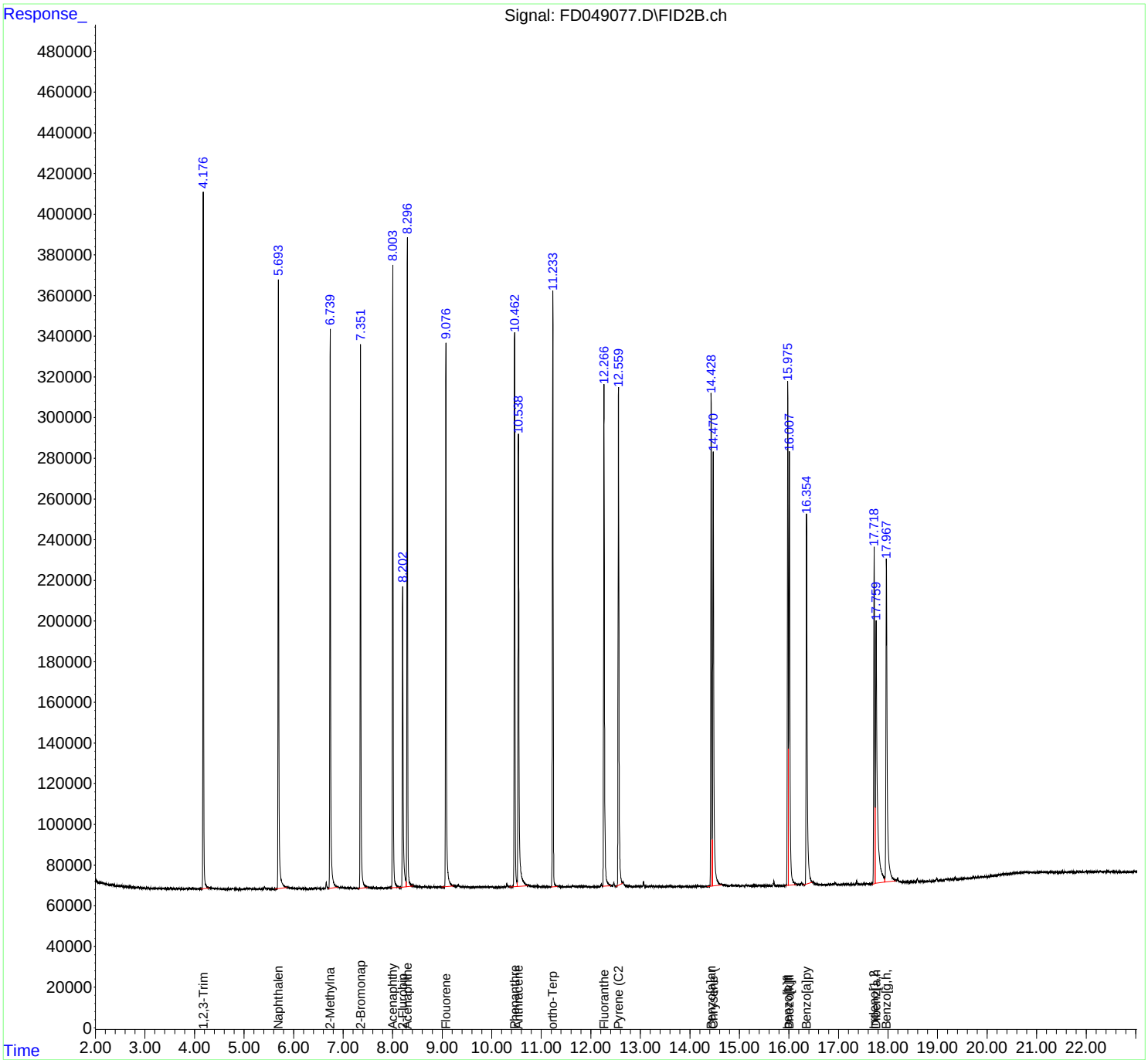
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD021125AR\
Data File : FD049077.D
Signal(s) : FID2B.ch
Acq On : 10 Feb 2025 16:24
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD ICV
Misc :
ALS Vial : 67 Sample Multiplier: 1

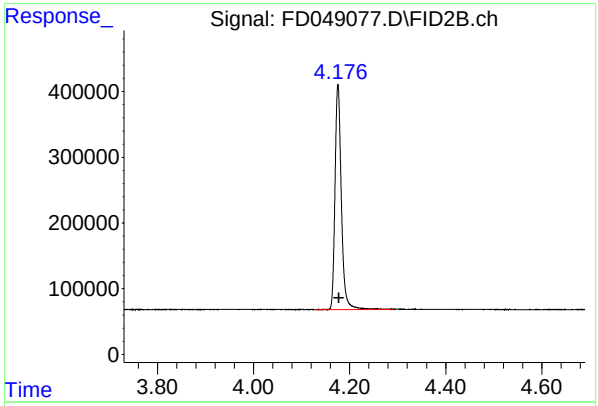
Integration File: autoint1.e
Quant Time: Feb 10 18:23:28 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Mon Feb 10 16:27:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD ICV

**Manual Integrations APPROVED**
Reviewed By :Yogesh Patel 02/11/2025
Supervised By :Ankita Jodhani 02/11/2025





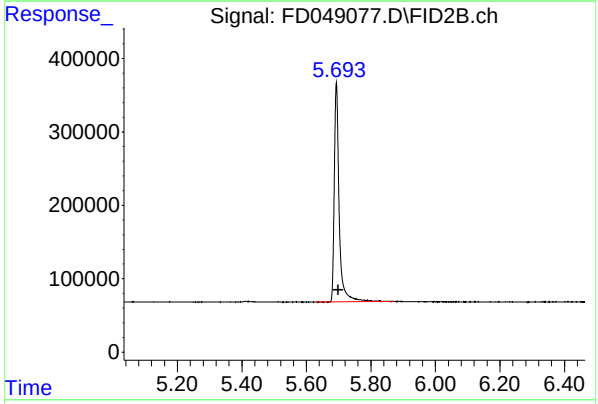

#1 1,2,3-Trimethylbenzene (C10.1)

R.T.: 4.176 min
Delta R.T.: -0.002 min
Response: 3134755
Conc: 19.68 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD ICV

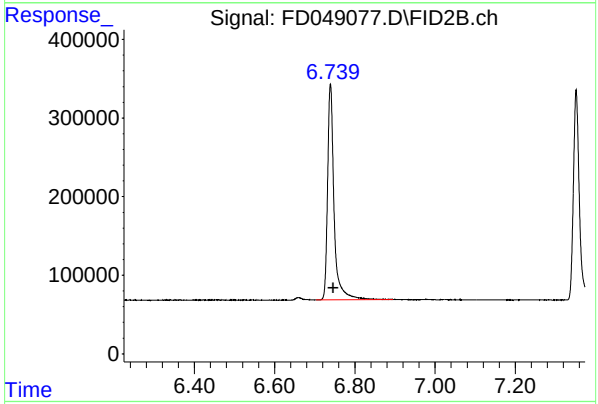
**Manual Integrations**
**APPROVED**

Reviewed By :Yogesh Patel 02/11/2025
Supervised By :Ankita Jodhani 02/11/2025



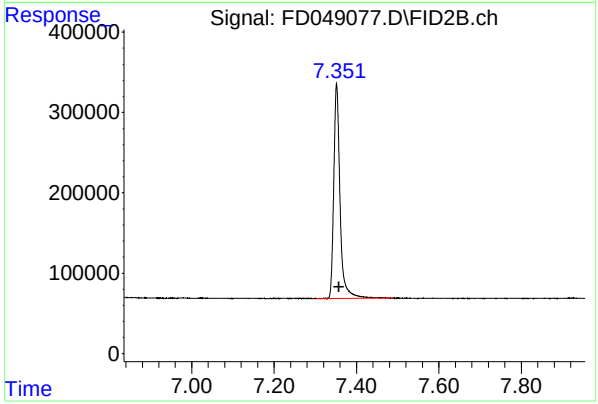

#2 Naphthalene (C11.7)

R.T.: 5.693 min
Delta R.T.: -0.006 min
Response: 3146803
Conc: 19.82 ug/ml



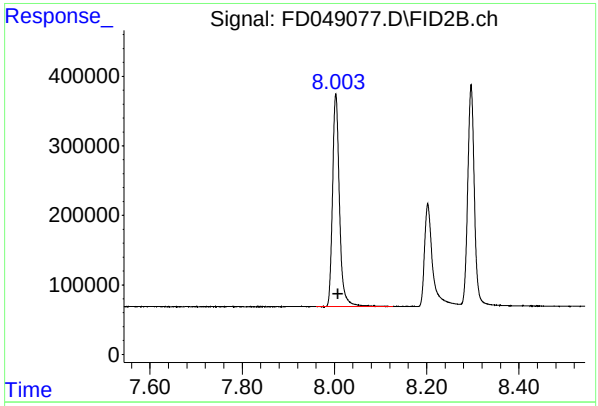

#3 2-Methylnaphthalene (C12.89)

R.T.: 6.739 min
Delta R.T.: -0.007 min
Response: 3087751
Conc: 19.83 ug/ml




#4 2-Bromonaphthalene (SURR)

R.T.: 7.352 min
Delta R.T.: -0.006 min
Response: 2822907
Conc: 19.73 ug/ml



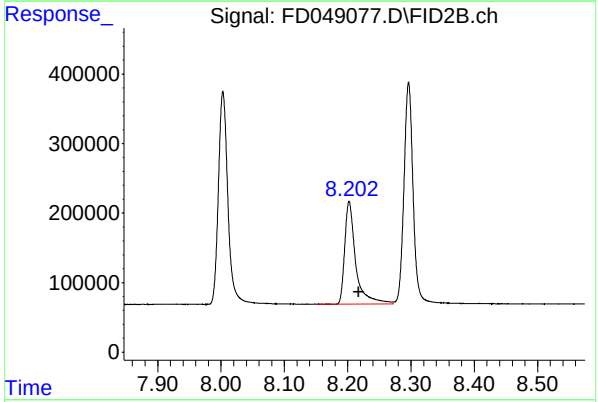

#5 Acenaphthylene (C15.06)

R.T.: 8.003 min
Delta R.T.: -0.004 min
Response: 3188327
Conc: 19.61 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD ICV

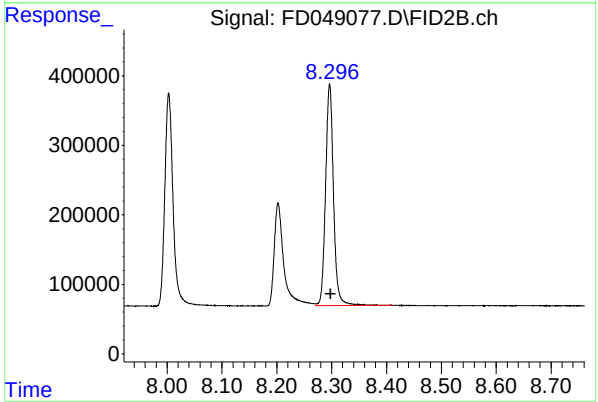
**Manual Integrations**
**APPROVED**

Reviewed By :Yogesh Patel 02/11/2025
Supervised By :Ankita Jodhani 02/11/2025



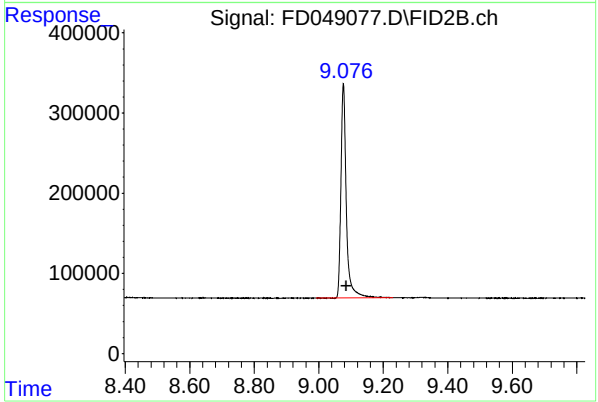

#6 2-Flurobiphenyl (SURR)

R.T.: 8.203 min
Delta R.T.: -0.015 min
Response: 1781261
Conc: 20.26 ug/ml



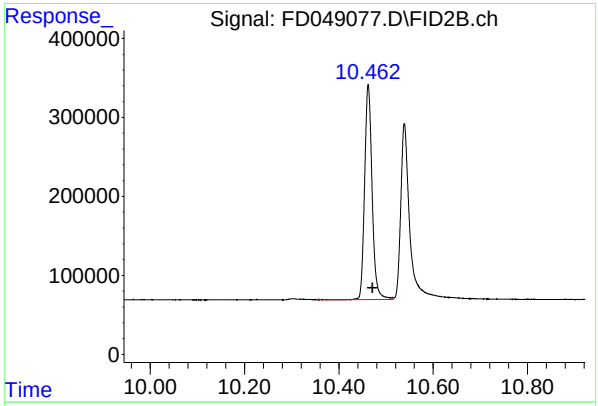

#7 Acenaphthene (C15.5)

R.T.: 8.296 min
Delta R.T.: -0.002 min
Response: 3203234
Conc: 19.47 ug/ml




#8 Flouorene (C16.55)

R.T.: 9.076 min
Delta R.T.: -0.008 min
Response: 3106009
Conc: 19.70 ug/ml



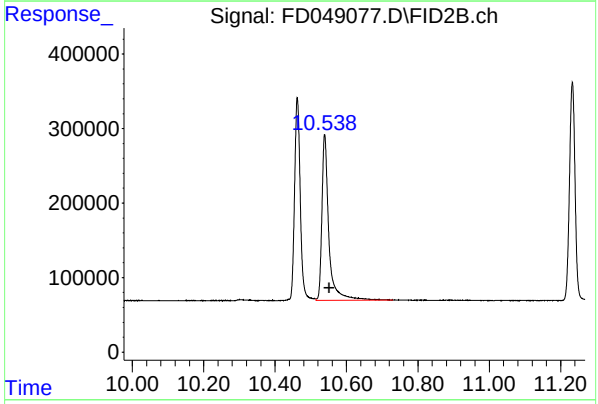

#9 Phenanthrene (C19.36)

R.T.: 10.462 min
Delta R.T.: -0.009 min
Response: 2995357
Conc: 19.88 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD ICV

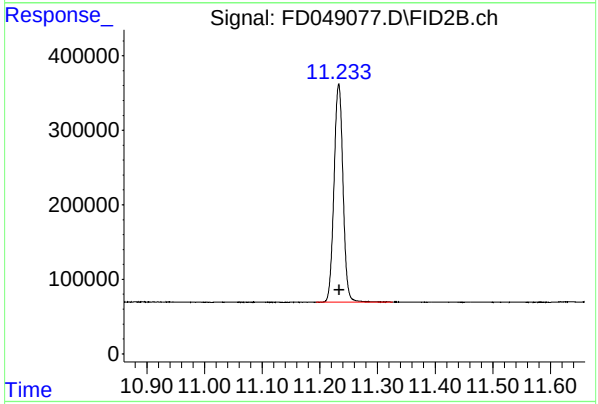
**Manual Integrations**
**APPROVED**

Reviewed By :Yogesh Patel 02/11/2025
Supervised By :Ankita Jodhani 02/11/2025



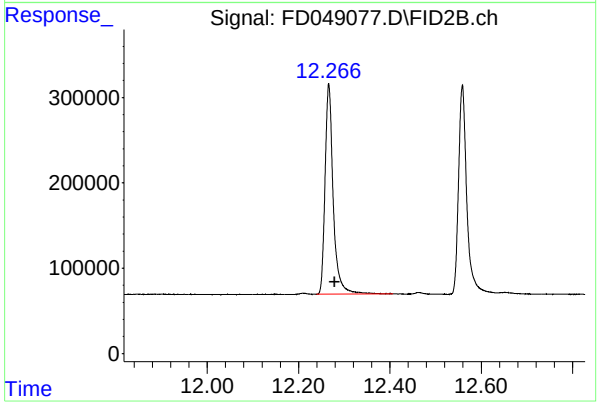

#10 Anthracene (C19.43)

R.T.: 10.539 min
Delta R.T.: -0.013 min
Response: 3001671
Conc: 19.87 ug/ml



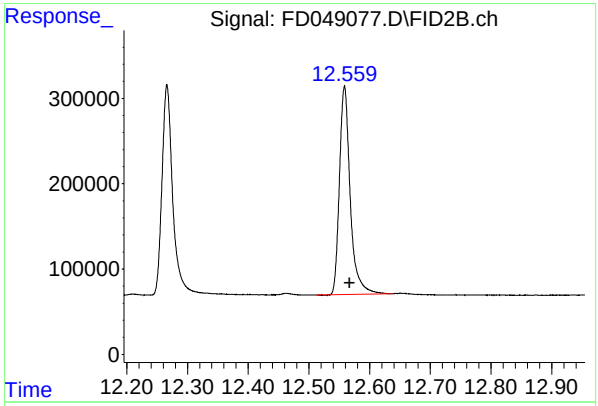

#11 ortho-Terphenyl (SURR)

R.T.: 11.233 min
Delta R.T.: -0.001 min
Response: 3178458
Conc: 19.65 ug/ml




#12 Fluoranthene (C21.85)

R.T.: 12.266 min
Delta R.T.: -0.013 min
Response: 3059686
Conc: 19.83 ug/ml



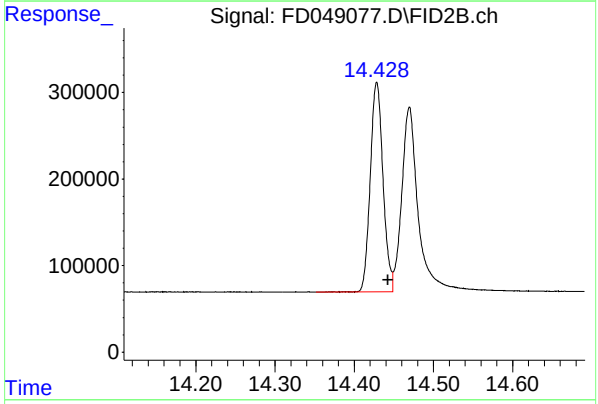

#13 Pyrene (C20.8)

R.T.: 12.559 min
Delta R.T.: -0.008 min
Response: 3015618
Conc: 19.57 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD ICV

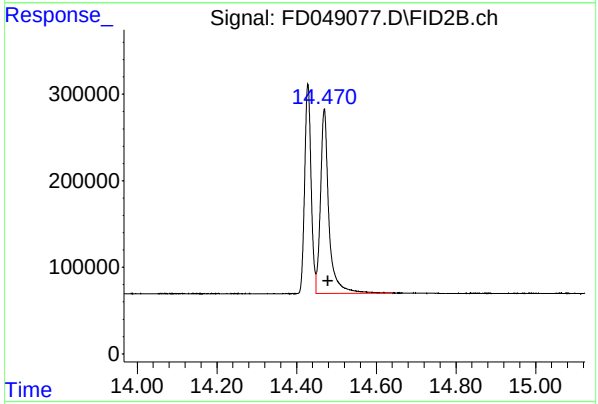
**Manual Integrations**
**APPROVED**

Reviewed By :Yogesh Patel 02/11/2025
Supervised By :Ankita Jodhani 02/11/2025



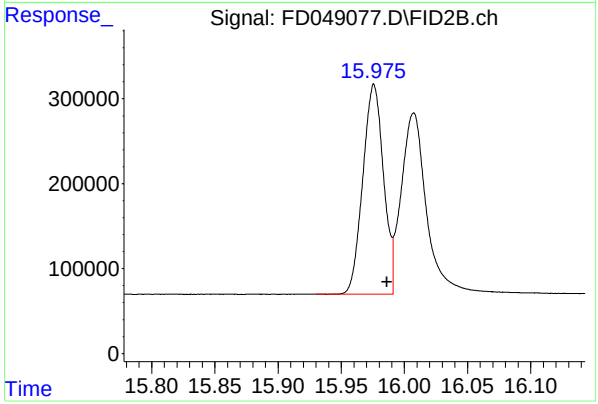

#14 Benzo[a]anthracene (C26.37)

R.T.: 14.428 min
Delta R.T.: -0.014 min
Response: 2707067
Conc: 20.60 ug/ml



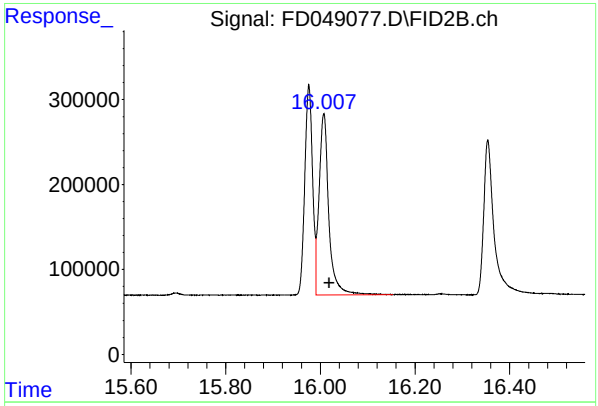

#15 Chrysene (C27.41)

R.T.: 14.470 min
Delta R.T.: -0.009 min
Response: 3142097
Conc: 19.43 ug/ml




#16 benzo[b]fluoranthene (C30.41)

R.T.: 15.976 min
Delta R.T.: -0.010 min
Response: 2807062
Conc: 20.40 ug/ml



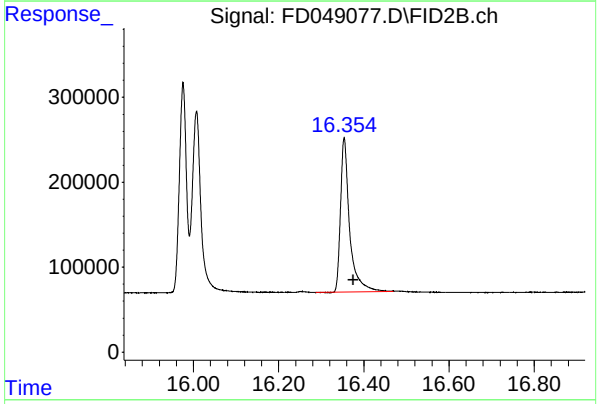

#17 Bnezo[k]fluoranthene (C30.14)

R.T.: 16.007 min
Delta R.T.: -0.012 min
Response: 3031459
Conc: 19.19 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD ICV

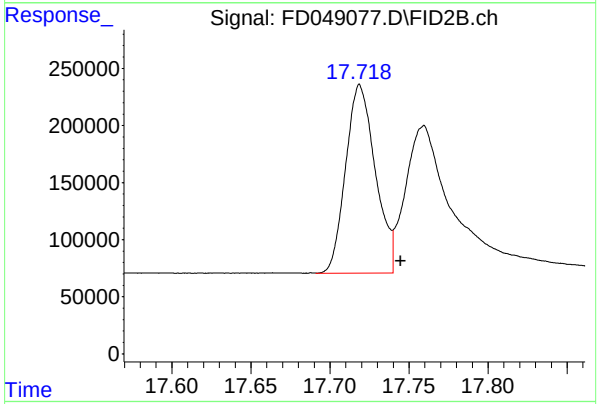
**Manual Integrations**
**APPROVED**

Reviewed By :Yogesh Patel 02/11/2025
Supervised By :Ankita Jodhani 02/11/2025



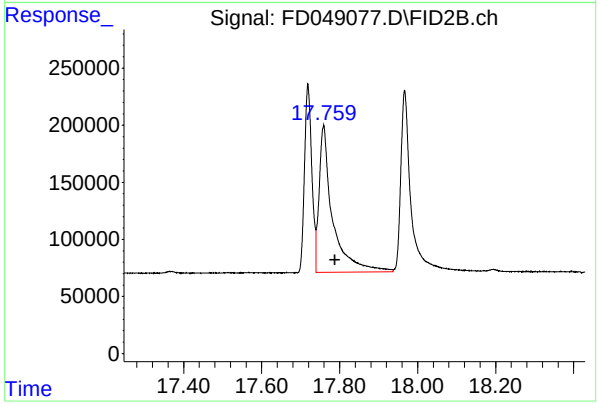

#18 Benzo[a]pyrene (C31.34)

R.T.: 16.354 min
Delta R.T.: -0.022 min
Response: 2694826
Conc: 19.85 ug/ml



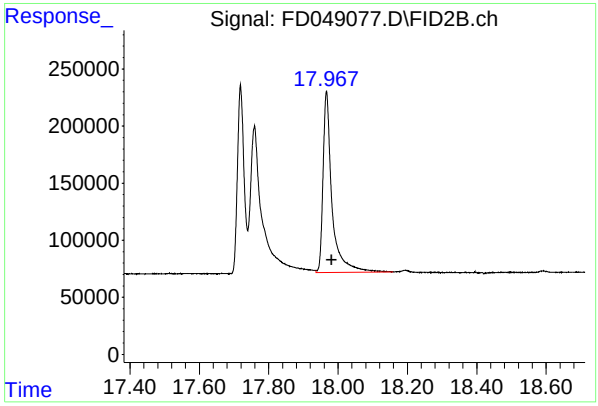

#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.718 min
Delta R.T.: -0.026 min
Response: 2162922
Conc: 19.79 ug/ml m




#20 Dibenz[a,h]anthracene (C30.36)

R.T.: 17.759 min
Delta R.T.: -0.029 min
Response: 3098291
Conc: 19.97 ug/ml




#21 Benzo[g,h,i]perylene (C34.01)

R.T.: 17.967 min
Delta R.T.: -0.015 mi
Response: 2849147
Conc: 19.66 ug/m

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD ICV

**Manual Integrations**
**APPROVED**

Reviewed By :Yogesh Patel 02/11/2025
Supervised By :Ankita Jodhani 02/11/2025

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD ICV

rteres

Area Percent Report

**Manual IntegrationsAPPROVED**

Reviewed By :Yogesh Patel 02/11/2025
Supervised By :Ankita Jodhani 02/11/2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD02112
Data File : FD049077.D
Signal(s) : FID2B.ch
Acq On : 10 Feb 2025 16:24
Sample : 20 PPM AROMATIC HC STD ICV
Misc :
ALS Vial : 67 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Title : GC Extractables

Signal : FID2B.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 4.176 | 4.130 | 4.290 | BV | 342184 | 3134755 | 97.86% | 5.122% |
| 2 | 5.693 | 5.630 | 5.868 | BB | 299016 | 3146803 | 98.24% | 5.142% |
| 3 | 6.739 | 6.703 | 6.895 | BB | 275219 | 3087751 | 96.39% | 5.046% |
| 4 | 7.352 | 7.302 | 7.488 | BB | 267137 | 2822907 | 88.13% | 4.613% |
| 5 | 8.003 | 7.960 | 8.127 | BB | 305766 | 3188327 | 99.53% | 5.210% |
| 6 | 8.203 | 8.150 | 8.272 | BV | 147711 | 1781261 | 55.61% | 2.911% |
| 7 | 8.296 | 8.272 | 8.412 | VB | 318821 | 3203234 | 100.00% | 5.234% |
| 8 | 9.076 | 8.992 | 9.230 | BB | 267490 | 3106009 | 96.96% | 5.075% |
| 9 | 10.462 | 10.352 | 10.515 | BV | 272649 | 2995357 | 93.51% | 4.895% |
| 10 | 10.539 | 10.515 | 10.730 | VV | 223108 | 3001671 | 93.71% | 4.905% |
| 11 | 11.233 | 11.193 | 11.327 | BB | 293357 | 3178458 | 99.23% | 5.194% |
| 12 | 12.266 | 12.238 | 12.407 | BB | 246286 | 3059686 | 95.52% | 5.000% |
| 13 | 12.559 | 12.512 | 12.638 | BV | 244060 | 3015618 | 94.14% | 4.928% |
| 14 | 14.428 | 14.352 | 14.449 | BV | 242288 | 2707067 | 84.51% | 4.424% |
| 15 | 14.470 | 14.449 | 14.642 | VB | 214017 | 3142097 | 98.09% | 5.134% |
| 16 | 15.976 | 15.930 | 15.991 | BV | 246799 | 2807062 | 87.63% | 4.587% |
| 17 | 16.007 | 15.991 | 16.153 | VB | 213051 | 3031459 | 94.64% | 4.954% |
| 18 | 16.354 | 16.288 | 16.468 | PV | 181424 | 2694826 | 84.13% | 4.404% |
| 19 | 17.719 | 17.690 | 17.740 | BV | 165163 | 2144691 | 66.95% | 3.505% |
| 20 | 17.759 | 17.740 | 17.937 | VV | 128285 | 3098291 | 96.72% | 5.063% |
| 21 | 17.967 | 17.937 | 18.158 | VB | 158807 | 2849147 | 88.95% | 4.656% |
| | | | Sum of corrected areas: | | | 61196477 | | |

Aromatic EPH 021125.M Tue Feb 11 00:34:31 2025

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

# Continuing Calibration Report for SequenceID : FC022725AL

| Parameter | AreaCount | Conc. | RT_Min | RT_Max | Response Factor | AVGRF | %DEV |
|---|---|---|---|---|---|---|---|
| **File ID :** | **FC068305.D** | | | | | | |
| Aliphatic C9-C12 | 8508042.000 | 60.000 | 3.104 | 6.370 | 141800.700 | 141035.502 | -0.543 |
| Aliphatic C12-C16 | 5470185.000 | 40.000 | 6.371 | 9.754 | 136754.625 | 136654.515 | -0.073 |
| Aliphatic C16-C21 | 7891316.000 | 60.000 | 9.755 | 13.108 | 131521.933 | 131630.895 | 0.083 |
| Aliphatic C21-C28 | 9875338.000 | 80.000 | 13.109 | 16.762 | 123441.725 | 122691.322 | -0.612 |
| Aliphatic C28-C40 | 12419303.000 | 120.000 | 16.763 | 21.566 | 103494.192 | 102846.462 | -0.630 |
| Aliphatic EPH | 44164184.000 | 360.000 | 3.104 | 21.566 | 122678.289 | 122175.127 | -0.412 |

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

| | | | |
|---|---|---|---|
| Lab Sample ID: | 20 PPM ALIPHATIC HC S | Acq On: | 27 Feb 2025 08:35 |
| Client Sample ID: | | Operator: | YP/AJ |
| Data file: | FC068305.D | Misc: | |
| Instrument: | FID_C | ALS Vial: | 2 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | Units |
|---|---|---|---|---|---|
| Aliphatic C9-C12 | 3.104 | 6.370 | 8508042.000 | 60.000 | ug/ml |
| Aliphatic C12-C16 | 6.371 | 9.754 | 5470185.000 | 40.000 | ug/ml |
| Aliphatic C16-C21 | 9.755 | 13.108 | 7891316.000 | 60.000 | ug/ml |
| Aliphatic C21-C28 | 13.109 | 16.762 | 9875338.000 | 80.000 | ug/ml |
| Aliphatic C28-C40 | 16.763 | 21.566 | 12419303.000 | 120.000 | ug/ml |
| Aliphatic EPH | 3.104 | 21.566 | 44164184.000 | 360.000 | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022725AL\
Data File : FC068305.D
Signal(s) : FID1A.ch
Acq On : 27 Feb 2025 08:35
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD

Integration File: autoint1.e
Quant Time: Mar 05 04:43:04 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

| | Compound | R.T. | Response | Conc Units |
|---|---|---|---|---|
| | **System Monitoring Compounds** | | | |
| 9) S | ortho-Terphenyl (SURR) | 11.397 | 3012962 | 19.636 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 39.27% |
| 12) S | 1-chlorooctadecane (S... | 12.839 | 2209163 | 19.641 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 39.28% |
| | **Target Compounds** | | | |
| 1) T | n-Nonane (C9) | 3.204 | 2820945 | 20.053 ug/ml |
| 2) T | n-Decane (C10) | 4.261 | 2860467 | 20.191 ug/ml |
| 3) T | A~Naphthalene (C11.7) | 5.828 | 3080036 | 20.126 ug/ml |
| 4) T | n-Dodecane (C12) | 6.270 | 2826630 | 20.081 ug/ml |
| 5) T | A~2-methylnaphthalene... | 6.881 | 2922228 | 20.177 ug/ml |
| 6) T | n-Tetradecane (C14) | 8.059 | 2724880 | 19.985 ug/ml |
| 7) T | n-Hexadecane (C16) | 9.654 | 2745305 | 20.044 ug/ml |
| 8) T | n-Octadecane (C18) | 11.092 | 2735800 | 20.005 ug/ml |
| 10) T | n-Eicosane (C20) | 12.399 | 2602340 | 19.974 ug/ml |
| 11) T | n-Heneicosane (C21) | 13.008 | 2553176 | 19.970 ug/ml |
| 13) T | n-Docosane (C22) | 13.594 | 2520745 | 20.001 ug/ml |
| 14) T | n-Tetracosane (C24) | 14.694 | 2501773 | 20.114 ug/ml |
| 15) T | n-Hexacosane (C26) | 15.714 | 2450259 | 20.151 ug/ml |
| 16) T | n-Octacosane (C28) | 16.662 | 2402561 | 20.229 ug/ml |
| 17) T | n-Tricontane (C30) | 17.549 | 2463685 | 20.468 ug/ml |
| 18) T | n-Dotriacontane (C32) | 18.380 | 2409233 | 20.757 ug/ml |
| 19) T | n-Tetratriacontane (C34) | 19.163 | 2161619 | 20.004 ug/ml |
| 20) T | n-Hexatriacontane (C36) | 19.902 | 1892710 | 19.681 ug/ml |
| 21) T | n-Octatriacontane (C38) | 20.613 | 1790381 | 19.916 ug/ml |
| 22) T | n-Tetracontane (C40) | 21.466 | 1701675 | 19.668 ug/ml |

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

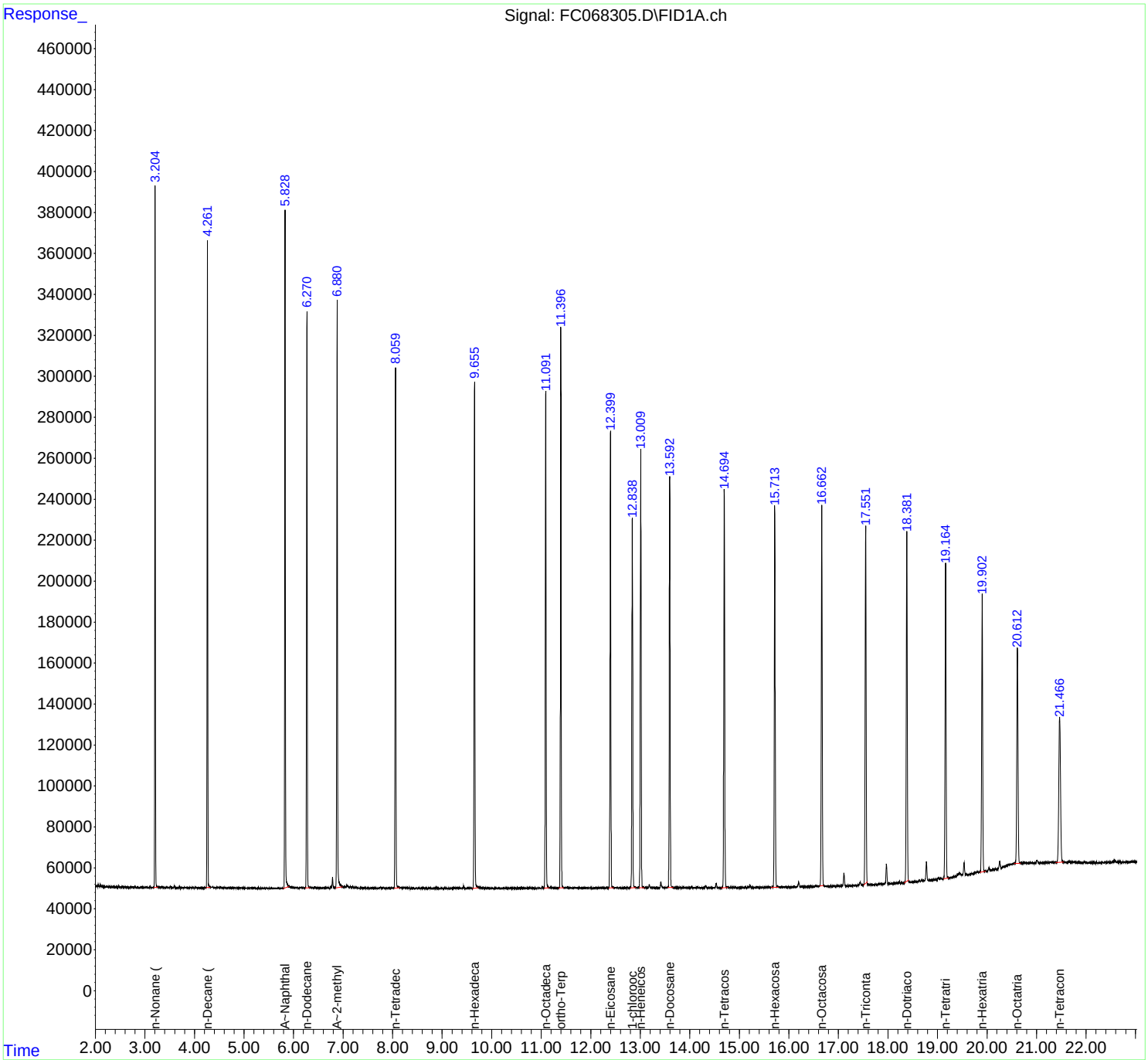
Quantitation Report (QT Reviewed)

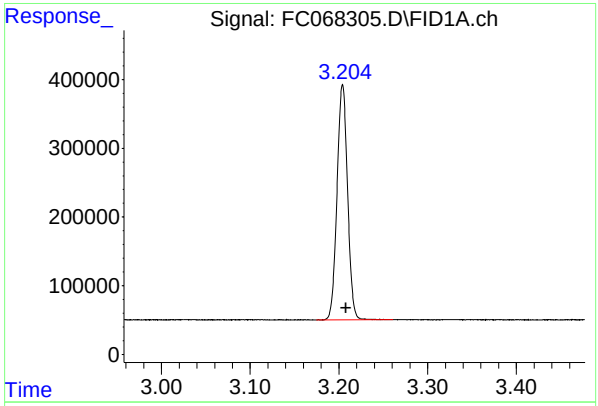
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022725AL\
Data File : FC068305.D
Signal(s) : FID1A.ch
Acq On : 27 Feb 2025 08:35
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD

Integration File: autoint1.e
Quant Time: Mar 05 04:43:04 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

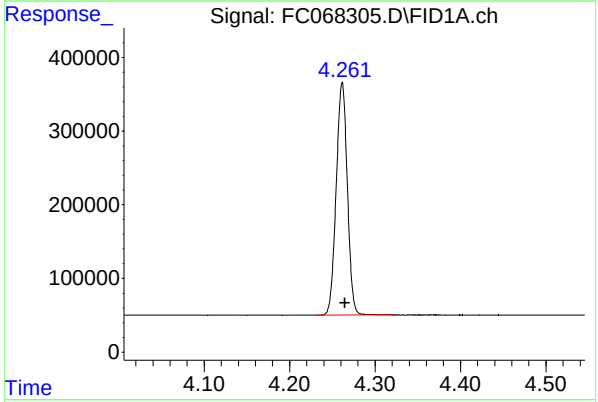





#1 n-Nonane (C9)

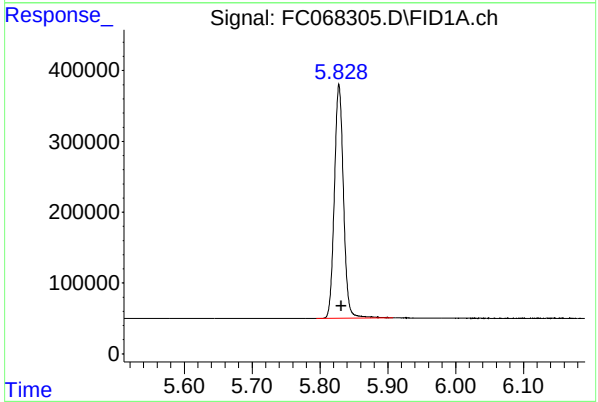
R.T.: 3.204 min
Delta R.T.: -0.004 min
Response: 2820945
Conc: 20.05 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD



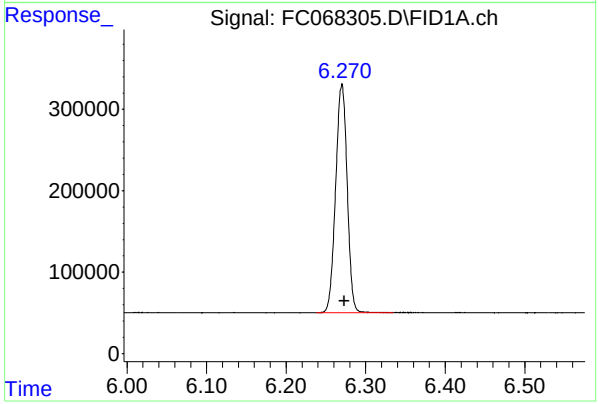

#2 n-Decane (C10)

R.T.: 4.261 min
Delta R.T.: -0.003 min
Response: 2860467
Conc: 20.19 ug/ml



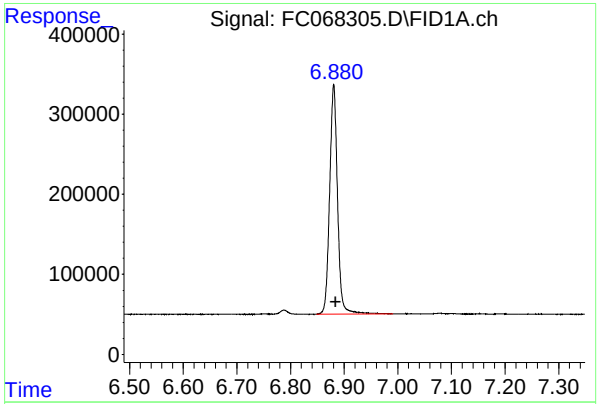

#3 A~Naphthalene (C11.7)

R.T.: 5.828 min
Delta R.T.: -0.003 min
Response: 3080036
Conc: 20.13 ug/ml




#4 n-Dodecane (C12)

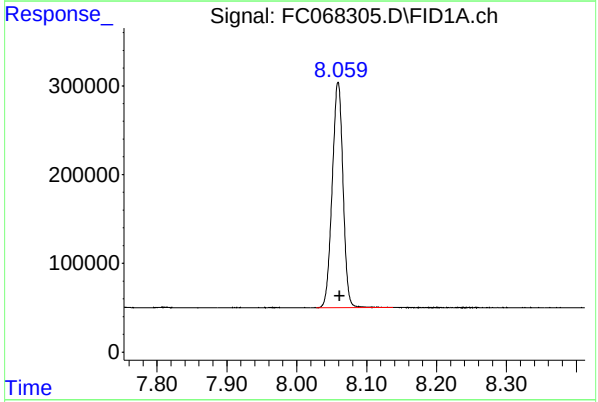
R.T.: 6.270 min
Delta R.T.: -0.003 min
Response: 2826630
Conc: 20.08 ug/ml




#5 A~2-methylnaphthalene (C12.89)

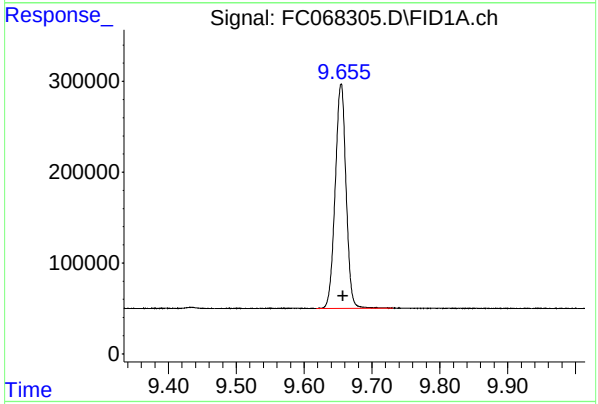
R.T.: 6.881 min
Delta R.T.: -0.003 min
Response: 2922228
Conc: 20.18 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD



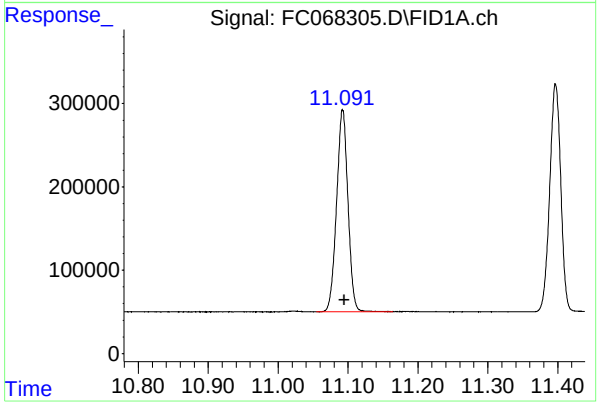

#6 n-Tetradecane (C14)

R.T.: 8.059 min
Delta R.T.: -0.003 min
Response: 2724880
Conc: 19.99 ug/ml



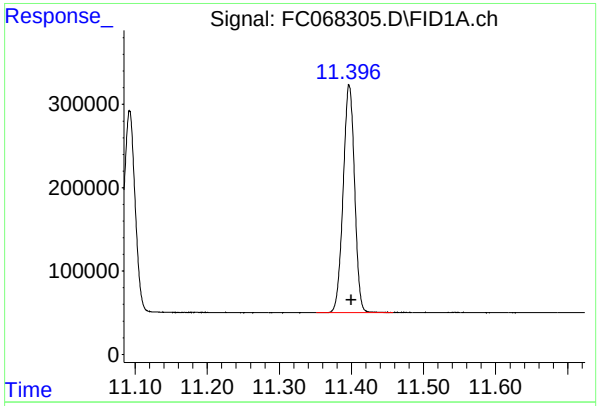

#7 n-Hexadecane (C16)

R.T.: 9.654 min
Delta R.T.: -0.003 min
Response: 2745305
Conc: 20.04 ug/ml




#8 n-Octadecane (C18)

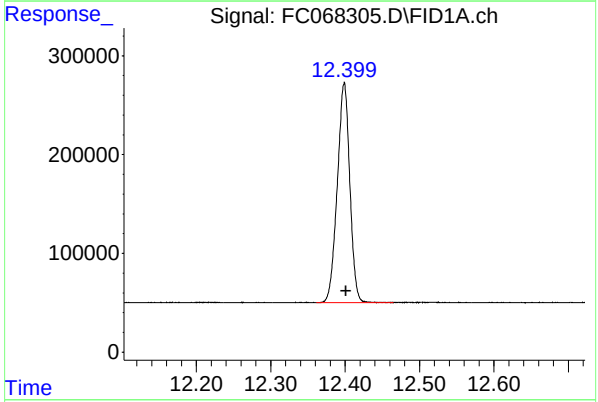
R.T.: 11.092 min
Delta R.T.: -0.002 min
Response: 2735800
Conc: 20.00 ug/ml




#9 ortho-Terphenyl (SURR)

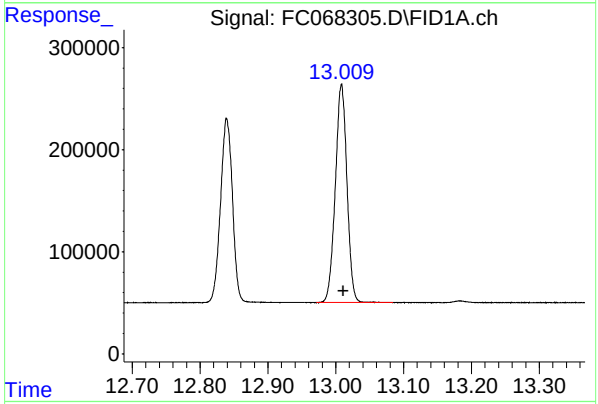
R.T.: 11.397 min
Delta R.T.: -0.003 min
Response: 3012962
Conc: 19.64 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD



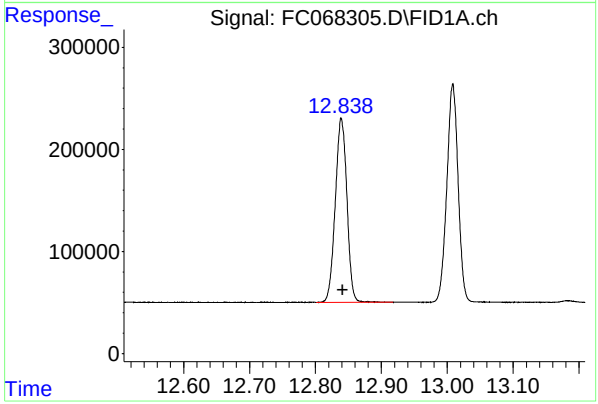

#10 n-Eicosane (C20)

R.T.: 12.399 min
Delta R.T.: -0.002 min
Response: 2602340
Conc: 19.97 ug/ml



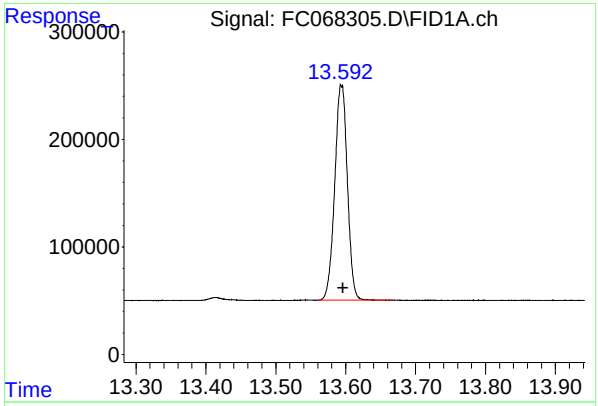

#11 n-Heneicosane (C21)

R.T.: 13.008 min
Delta R.T.: -0.002 min
Response: 2553176
Conc: 19.97 ug/ml




#12 1-chlorooctadecane (SURR)

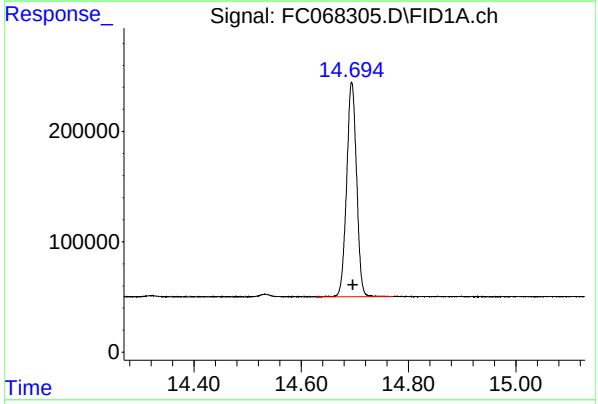
R.T.: 12.839 min
Delta R.T.: -0.002 min
Response: 2209163
Conc: 19.64 ug/ml




#13 n-Docosane (C22)

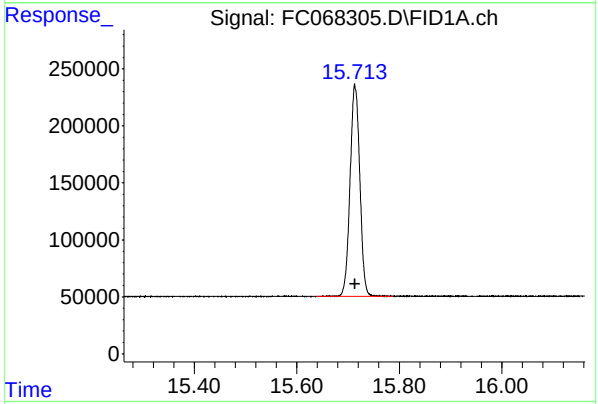
R.T.: 13.594 min
Delta R.T.: -0.002 min
Response: 2520745
Conc: 20.00 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD



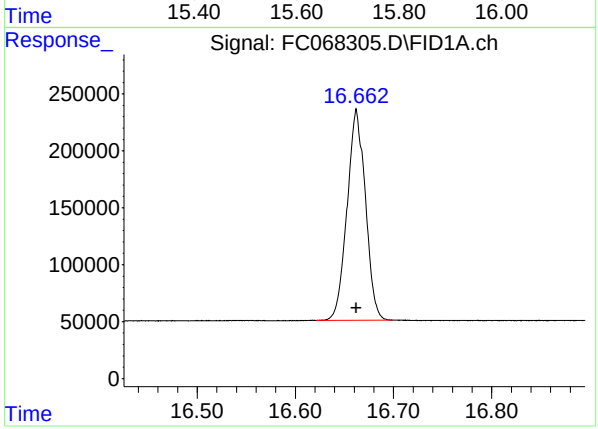

#14 n-Tetracosane (C24)

R.T.: 14.694 min
Delta R.T.: -0.002 min
Response: 2501773
Conc: 20.11 ug/ml



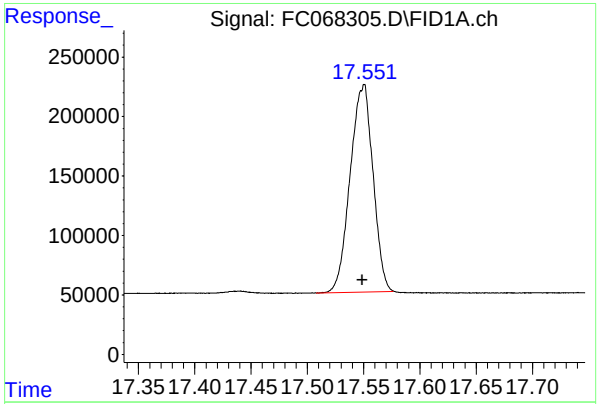

#15 n-Hexacosane (C26)

R.T.: 15.714 min
Delta R.T.: 0.000 min
Response: 2450259
Conc: 20.15 ug/ml




#16 n-Octacosane (C28)

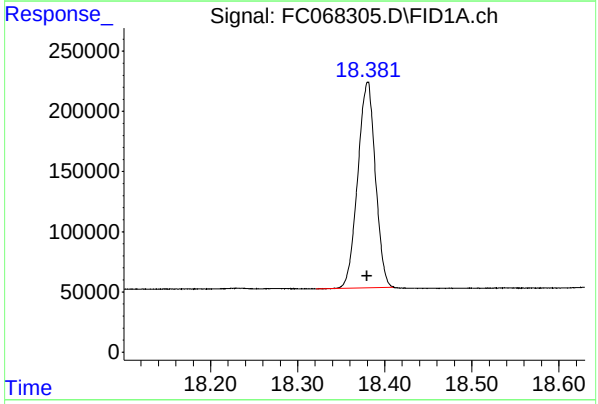
R.T.: 16.662 min
Delta R.T.: 0.000 min
Response: 2402561
Conc: 20.23 ug/ml




#17 n-Tricontane (C30)

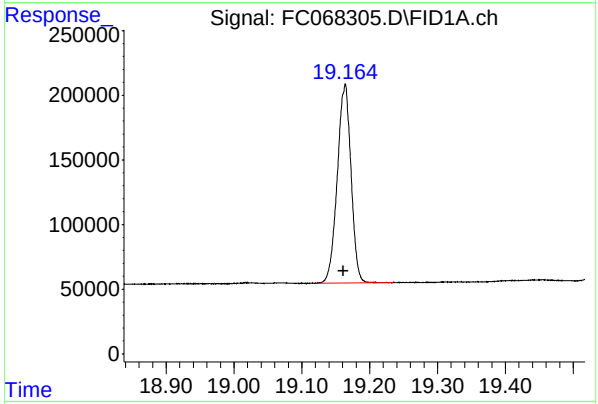
R.T.: 17.549 min
Delta R.T.: 0.000 min
Response: 2463685
Conc: 20.47 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD



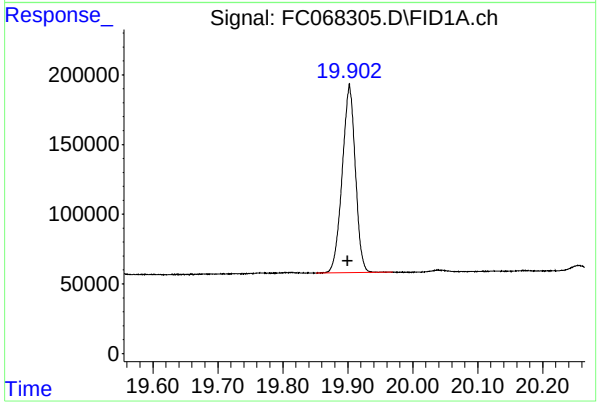

#18 n-Dotriacontane (C32)

R.T.: 18.380 min
Delta R.T.: 0.000 min
Response: 2409233
Conc: 20.76 ug/ml



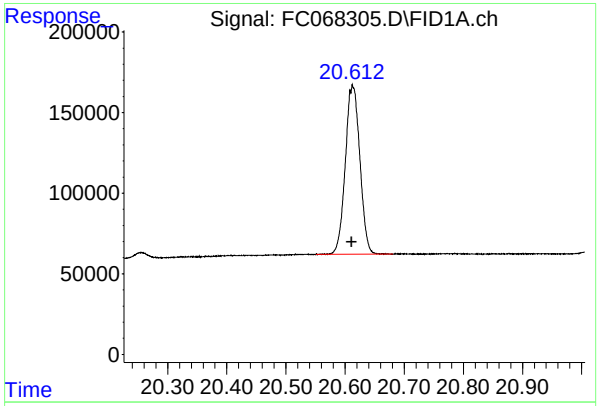

#19 n-Tetratriacontane (C34)

R.T.: 19.163 min
Delta R.T.: 0.002 min
Response: 2161619
Conc: 20.00 ug/ml




#20 n-Hexatriacontane (C36)

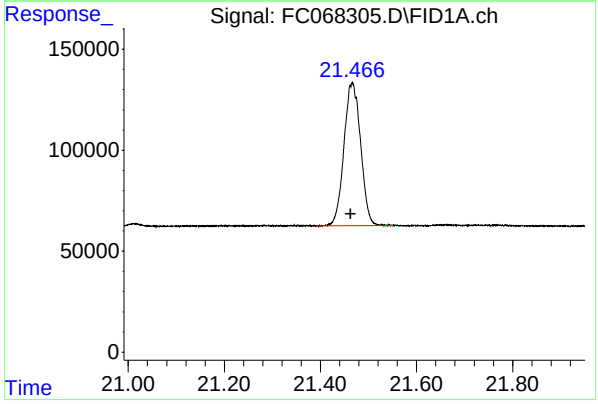
R.T.: 19.902 min
Delta R.T.: 0.002 min
Response: 1892710
Conc: 19.68 ug/ml




#21 n-Octatriacontane (C38)

R.T.: 20.613 min
Delta R.T.: 0.002 min
Response: 1790381
Conc: 19.92 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD




#22 n-Tetracontane (C40)

R.T.: 21.466 min
Delta R.T.: 0.003 min
Response: 1701675
Conc: 19.67 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022725AL\
Data File : FC068305.D
Signal(s) : FID1A.ch
Acq On : 27 Feb 2025 08:35
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Title : GC Extractables

Signal : FID1A.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 3.204 | 3.174 | 3.261 | BB | 341963 | 2820945 | 91.59% | 5.085% |
| 2 | 4.261 | 4.231 | 4.321 | BB | 314410 | 2860467 | 92.87% | 5.156% |
| 3 | 5.828 | 5.794 | 5.908 | BB | 328391 | 3080036 | 100.00% | 5.552% |
| 4 | 6.270 | 6.238 | 6.334 | BB | 280365 | 2826630 | 91.77% | 5.095% |
| 5 | 6.881 | 6.848 | 6.991 | BB | 286493 | 2922228 | 94.88% | 5.268% |
| 6 | 8.059 | 8.028 | 8.138 | BB | 253840 | 2724880 | 88.47% | 4.912% |
| 7 | 9.654 | 9.618 | 9.731 | BB | 247600 | 2745305 | 89.13% | 4.949% |
| 8 | 11.092 | 11.054 | 11.164 | BB | 241842 | 2735800 | 88.82% | 4.932% |
| 9 | 11.397 | 11.351 | 11.458 | BB | 273378 | 3012962 | 97.82% | 5.431% |
| 10 | 12.399 | 12.361 | 12.464 | BB | 221302 | 2602340 | 84.49% | 4.691% |
| 11 | 12.839 | 12.801 | 12.918 | BB | 178061 | 2209163 | 71.73% | 3.982% |
| 12 | 13.008 | 12.971 | 13.084 | BB | 213349 | 2553176 | 82.89% | 4.603% |
| 13 | 13.594 | 13.558 | 13.668 | BB | 200426 | 2520745 | 81.84% | 4.544% |
| 14 | 14.694 | 14.628 | 14.771 | BB | 194449 | 2501773 | 81.23% | 4.510% |
| 15 | 15.714 | 15.638 | 15.788 | BB | 183663 | 2450259 | 79.55% | 4.417% |
| 16 | 16.662 | 16.598 | 16.734 | BB | 181831 | 2422985 | 78.67% | 4.368% |
| 17 | 17.549 | 17.488 | 17.614 | BB | 178747 | 2499967 | 81.17% | 4.507% |
| 18 | 18.380 | 18.321 | 18.438 | BB | 173472 | 2437195 | 79.13% | 4.393% |
| 19 | 19.163 | 19.121 | 19.234 | BB | 154889 | 2161619 | 70.18% | 3.897% |
| 20 | 19.902 | 19.851 | 19.969 | BBA | 132849 | 1892710 | 61.45% | 3.412% |
| 21 | 20.613 | 20.551 | 20.681 | BB | 104490 | 1790381 | 58.13% | 3.227% |
| 22 | 21.466 | 21.391 | 21.551 | BB | 70075 | 1701675 | 55.25% | 3.068% |
| | | | Sum of corrected areas: | | | 55473240 | | |

Aliphatic EPH 021125.M Fri Feb 28 01:07:52 2025

Evaluate Continuing Calibration Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022725AL\
Data File : FC068305.D
Signal(s) : FID1A.ch
Acq On : 27 Feb 2025 08:35
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
FID_C
**LabSampleId :**
20 PPM ALIPHATIC HC STD

Integration File: autoint1.e
Quant Time: Mar 05 04:43:04 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 1 | T | n-Nonane (C9) | 140.677 | 141.047 | E3 | -0.3 | 100 | 0.00 |
| 2 | T | n-Decane (C10) | 141.671 | 143.023 | E3 | -1.0 | 100 | 0.00 |
| 3 | T | A~Naphthalene (C11.7) | 153.034 | 154.002 | E3 | -0.6 | 100 | 0.00 |
| 4 | T | n-Dodecane (C12) | 140.758 | 141.331 | E3 | -0.4 | 100 | 0.00 |
| 5 | T | A~2-methylnaphthalene (C12. | 144.828 | 146.111 | E3 | -0.9 | 100 | 0.00 |
| 6 | T | n-Tetradecane (C14) | 136.344 | 136.244 | E3 | 0.1 | 100 | 0.00 |
| 7 | T | n-Hexadecane (C16) | 136.965 | 137.265 | E3 | -0.2 | 100 | 0.00 |
| 8 | T | n-Octadecane (C18) | 136.758 | 136.790 | E3 | -0.0 | 100 | 0.00 |
| 9 | S | ortho-Terphenyl (SURR) | 153.444 | 150.648 | E3 | 1.8 | 98 | 0.00 |
| 10 | T | n-Eicosane (C20) | 130.287 | 130.117 | E3 | 0.1 | 100 | 0.00 |
| 11 | T | n-Heneicosane (C21) | 127.847 | 127.659 | E3 | 0.1 | 100 | 0.00 |
| 12 | S | 1-chlorooctadecane (SURR) | 112.474 | 110.458 | E3 | 1.8 | 98 | 0.00 |
| 13 | T | n-Docosane (C22) | 126.028 | 126.037 | E3 | -0.0 | 100 | 0.00 |
| 14 | T | n-Tetracosane (C24) | 124.377 | 125.089 | E3 | -0.6 | 100 | 0.00 |
| 15 | T | n-Hexacosane (C26) | 121.593 | 122.513 | E3 | -0.8 | 101 | 0.00 |
| 16 | T | n-Octacosane (C28) | 118.767 | 120.128 | E3 | -1.1 | 101 | 0.00 |
| 17 | T | n-Tricontane (C30) | 120.366 | 123.184 | E3 | -2.3 | 103 | 0.00 |
| 18 | T | n-Dotriacontane (C32) | 116.067 | 120.462 | E3 | -3.8 | 104 | 0.00 |
| 19 | T | n-Tetratriacontane (C34) | 108.059 | 108.081 | E3 | -0.0 | 100 | 0.00 |
| 20 | T | n-Hexatriacontane (C36) | 96.169 | 94.636 | E3 | 1.6 | 99 | 0.00 |
| 21 | T | n-Octatriacontane (C38) | 89.898 | 89.519 | E3 | 0.4 | 99 | 0.00 |
| 22 | T | n-Tetracontane (C40) | 86.520 | 85.084 | E3 | 1.7 | 98 | 0.00 |

Evaluate Continuing Calibration Report - Not Founds

---

(#) = Out of Range SPCC's out = 0 CCC's out = 0

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

# Continuing Calibration Report for SequenceID : FC022725AL

| Parameter | AreaCount | Conc. | RT_Min | RT_Max | Response Factor | AVGRF | %DEV |
|---|---|---|---|---|---|---|---|
| **File ID :** | **FC068311.D** | | | | | | |
| Aliphatic C9-C12 | 8524811.000 | 60.000 | 3.104 | 6.370 | 142080.183 | 141035.502 | -0.741 |
| Aliphatic C12-C16 | 5481046.000 | 40.000 | 6.371 | 9.754 | 137026.150 | 136654.515 | -0.272 |
| Aliphatic C16-C21 | 7930526.000 | 60.000 | 9.755 | 13.108 | 132175.433 | 131630.895 | -0.414 |
| Aliphatic C21-C28 | 9943045.000 | 80.000 | 13.109 | 16.762 | 124288.063 | 122691.322 | -1.301 |
| Aliphatic C28-C40 | 12574868.000 | 120.000 | 16.763 | 21.566 | 104790.567 | 102846.462 | -1.890 |
| Aliphatic EPH | 44454296.000 | 360.000 | 3.104 | 21.566 | 123484.156 | 122175.127 | -1.071 |

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

| | | | |
|---|---|---|---|
| Lab Sample ID: | 20 PPM ALIPHATIC HC S | Acq On: | 27 Feb 2025 13:27 |
| Client Sample ID: | | Operator: | YP/AJ |
| Data file: | FC068311.D | Misc: | |
| Instrument: | FID_C | ALS Vial: | 2 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | Units |
|---|---|---|---|---|---|
| Aliphatic C9-C12 | 3.104 | 6.370 | 8524811.000 | 60.000 | ug/ml |
| Aliphatic C12-C16 | 6.371 | 9.754 | 5481046.000 | 40.000 | ug/ml |
| Aliphatic C16-C21 | 9.755 | 13.108 | 7930526.000 | 60.000 | ug/ml |
| Aliphatic C21-C28 | 13.109 | 16.762 | 9943045.000 | 80.000 | ug/ml |
| Aliphatic C28-C40 | 16.763 | 21.566 | 12574868.000 | 120.000 | ug/ml |
| Aliphatic EPH | 3.104 | 21.566 | 44454296.000 | 360.000 | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022725AL\
Data File : FC068311.D
Signal(s) : FID1A.ch
Acq On : 27 Feb 2025 13:27
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD

Integration File: autoint1.e
Quant Time: Mar 05 04:44:23 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

| | Compound | R.T. | Response | Conc Units |
|---|---|---|---|---|
| | **System Monitoring Compounds** | | | |
| 9) | S ortho-Terphenyl (SURR) | 11.397 | 3033346 | 19.768 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 39.54% |
| 12) | S 1-chlorooctadecane (S... | 12.840 | 2221647 | 19.752 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 39.50% |
| | **Target Compounds** | | | |
| 1) | T n-Nonane (C9) | 3.204 | 2828328 | 20.105 ug/ml |
| 2) | T n-Decane (C10) | 4.261 | 2864523 | 20.219 ug/ml |
| 3) | T A~Naphthalene (C11.7) | 5.828 | 3091717 | 20.203 ug/ml |
| 4) | T n-Dodecane (C12) | 6.270 | 2831960 | 20.119 ug/ml |
| 5) | T A~2-methylnaphthalene... | 6.880 | 2921670 | 20.173 ug/ml |
| 6) | T n-Tetradecane (C14) | 8.058 | 2729412 | 20.019 ug/ml |
| 7) | T n-Hexadecane (C16) | 9.654 | 2751634 | 20.090 ug/ml |
| 8) | T n-Octadecane (C18) | 11.092 | 2749117 | 20.102 ug/ml |
| 10) | T n-Eicosane (C20) | 12.398 | 2618262 | 20.096 ug/ml |
| 11) | T n-Heneicosane (C21) | 13.009 | 2563147 | 20.048 ug/ml |
| 13) | T n-Docosane (C22) | 13.594 | 2536870 | 20.129 ug/ml |
| 14) | T n-Tetracosane (C24) | 14.695 | 2513548 | 20.209 ug/ml |
| 15) | T n-Hexacosane (C26) | 15.714 | 2468793 | 20.304 ug/ml |
| 16) | T n-Octacosane (C28) | 16.663 | 2423834 | 20.408 ug/ml |
| 17) | T n-Tricontane (C30) | 17.550 | 2494006 | 20.720 ug/ml |
| 18) | T n-Dotriacontane (C32) | 18.381 | 2439083 | 21.014 ug/ml |
| 19) | T n-Tetratriacontane (C34) | 19.164 | 2196747 | 20.329 ug/ml |
| 20) | T n-Hexatriacontane (C36) | 19.902 | 1915492 | 19.918 ug/ml |
| 21) | T n-Octatriacontane (C38) | 20.616 | 1807621 | 20.108 ug/ml |
| 22) | T n-Tetracontane (C40) | 21.467 | 1721919 | 19.902 ug/ml |

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

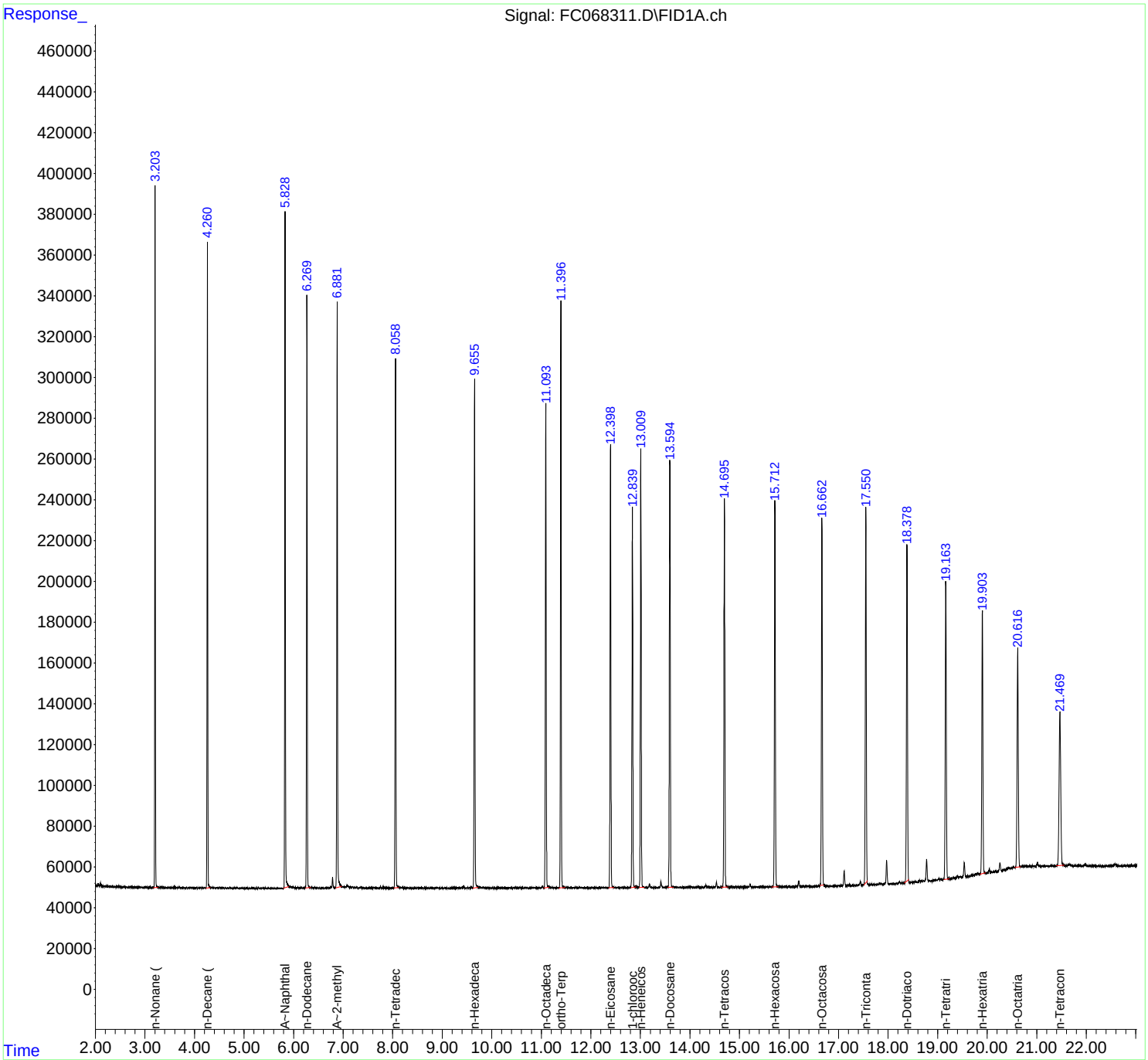
Quantitation Report (QT Reviewed)

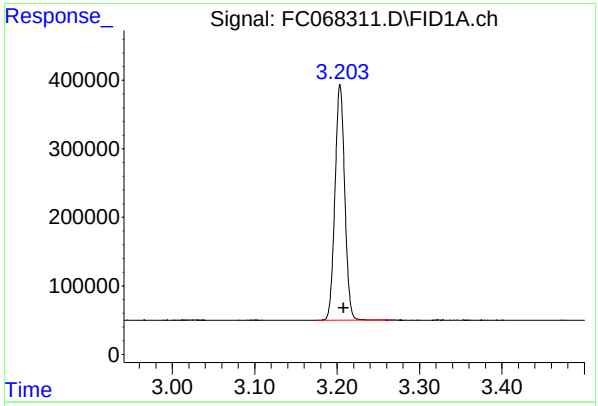
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022725AL\
Data File : FC068311.D
Signal(s) : FID1A.ch
Acq On : 27 Feb 2025 13:27
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD

Integration File: autoint1.e
Quant Time: Mar 05 04:44:23 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

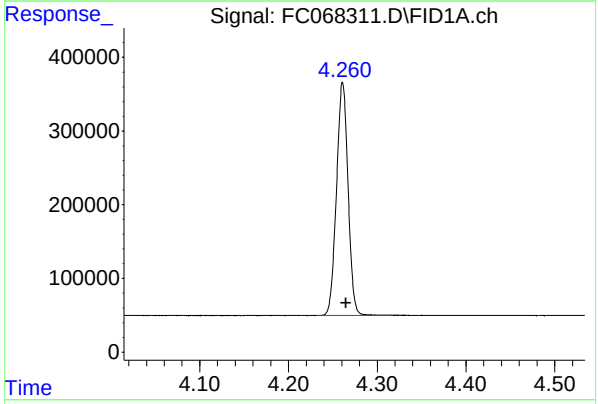





#1 n-Nonane (C9)

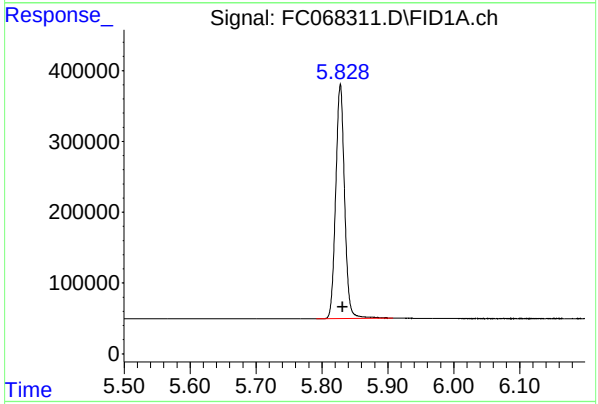
R.T.: 3.204 min
Delta R.T.: -0.004 min
Response: 2828328
Conc: 20.11 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD



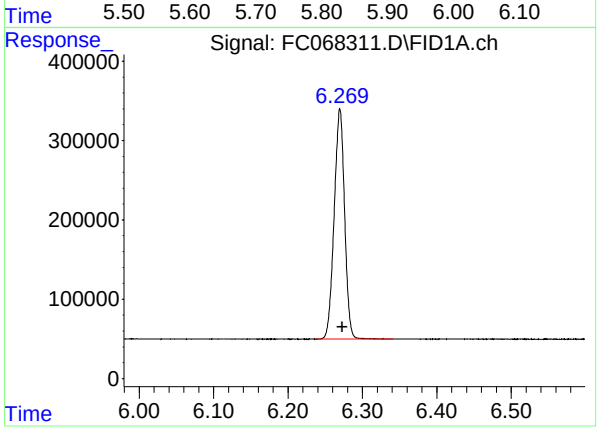

#2 n-Decane (C10)

R.T.: 4.261 min
Delta R.T.: -0.004 min
Response: 2864523
Conc: 20.22 ug/ml



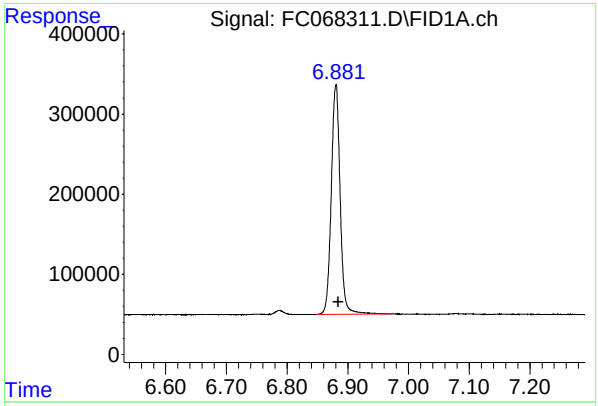

#3 A~Naphthalene (C11.7)

R.T.: 5.828 min
Delta R.T.: -0.004 min
Response: 3091717
Conc: 20.20 ug/ml




#4 n-Dodecane (C12)

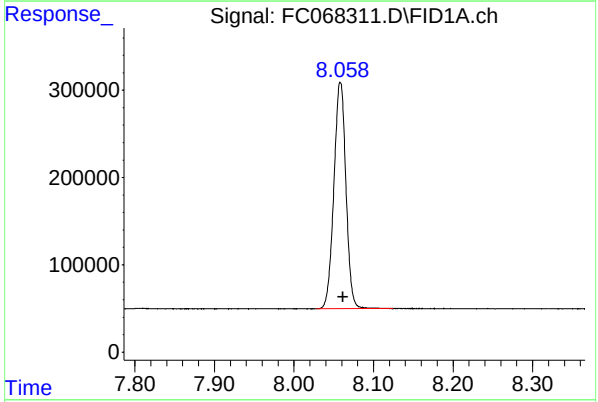
R.T.: 6.270 min
Delta R.T.: -0.003 min
Response: 2831960
Conc: 20.12 ug/ml




#5 A~2-methylnaphthalene (C12.89)

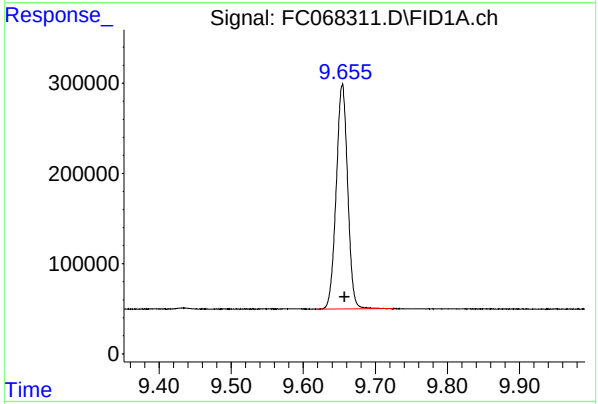
R.T.: 6.880 min
Delta R.T.: -0.004 min
Response: 2921670
Conc: 20.17 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD



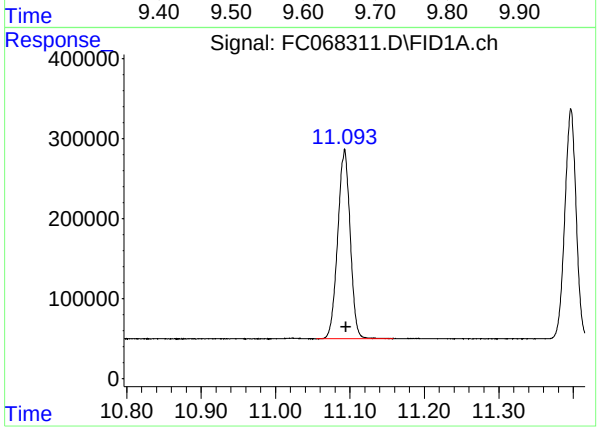

#6 n-Tetradecane (C14)

R.T.: 8.058 min
Delta R.T.: -0.003 min
Response: 2729412
Conc: 20.02 ug/ml



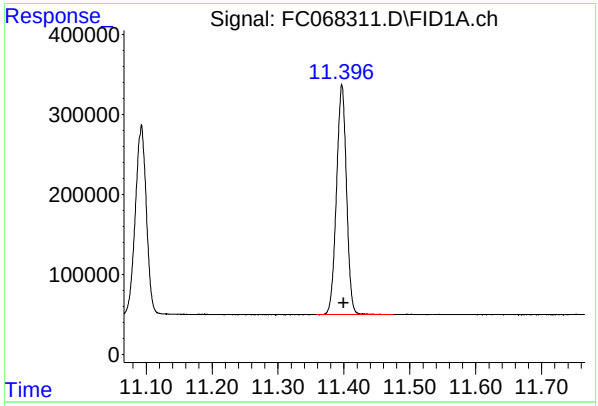

#7 n-Hexadecane (C16)

R.T.: 9.654 min
Delta R.T.: -0.003 min
Response: 2751634
Conc: 20.09 ug/ml




#8 n-Octadecane (C18)

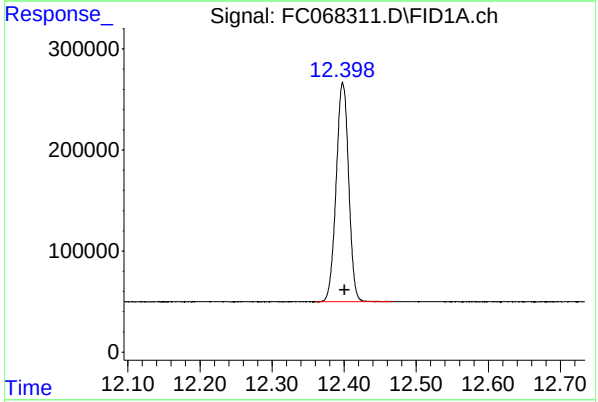
R.T.: 11.092 min
Delta R.T.: -0.002 min
Response: 2749117
Conc: 20.10 ug/ml




#9 ortho-Terphenyl (SURR)

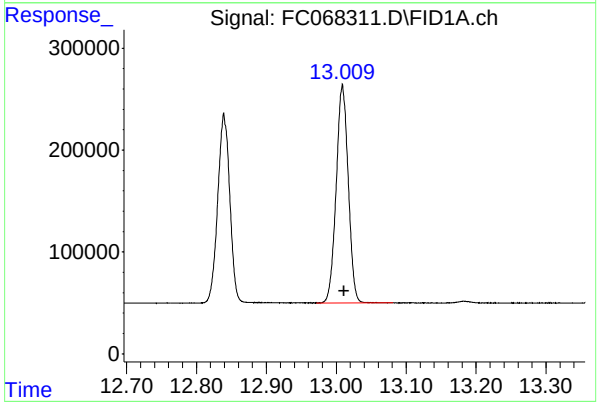
R.T.: 11.397 min
Delta R.T.: -0.003 min
Response: 3033346
Conc: 19.77 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD



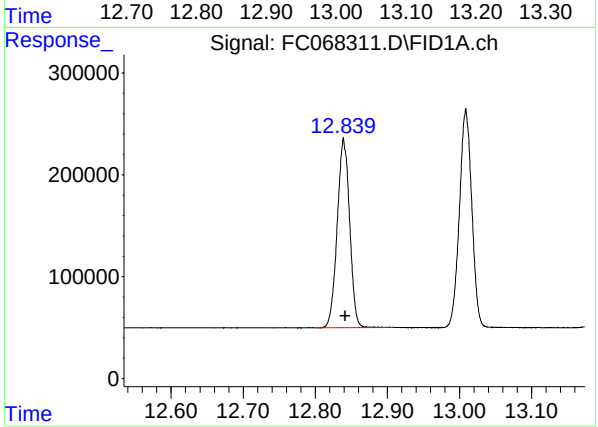

#10 n-Eicosane (C20)

R.T.: 12.398 min
Delta R.T.: -0.003 min
Response: 2618262
Conc: 20.10 ug/ml



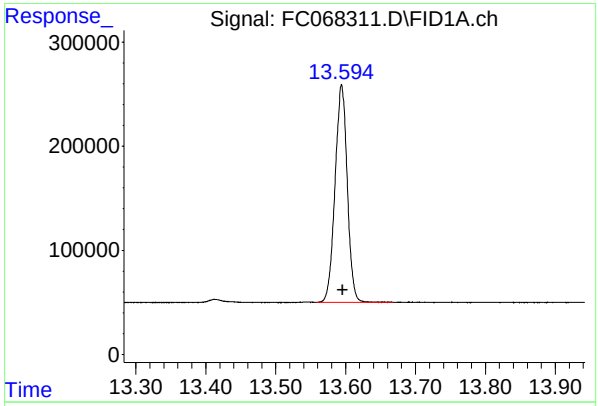

#11 n-Heneicosane (C21)

R.T.: 13.009 min
Delta R.T.: -0.002 min
Response: 2563147
Conc: 20.05 ug/ml




#12 1-chlorooctadecane (SURR)

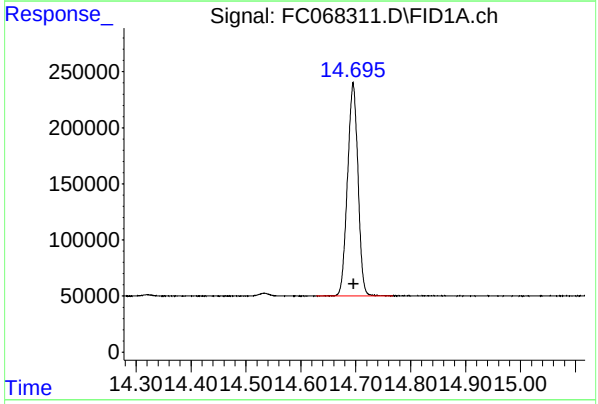
R.T.: 12.840 min
Delta R.T.: -0.002 min
Response: 2221647
Conc: 19.75 ug/ml




#13 n-Docosane (C22)

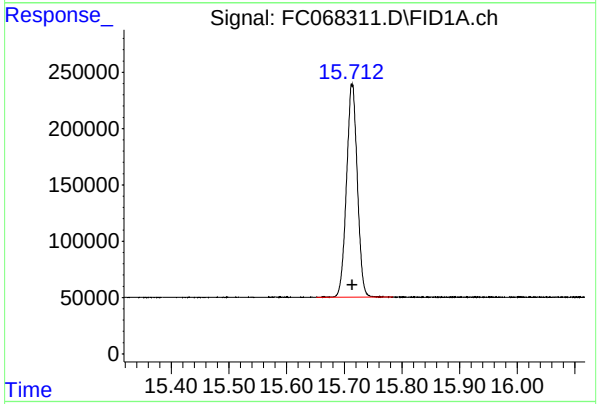
R.T.: 13.594 min
Delta R.T.: -0.002 min
Response: 2536870
Conc: 20.13 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD



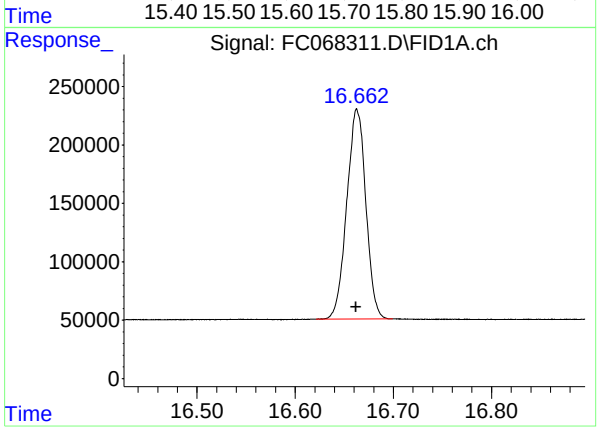

#14 n-Tetracosane (C24)

R.T.: 14.695 min
Delta R.T.: 0.000 min
Response: 2513548
Conc: 20.21 ug/ml



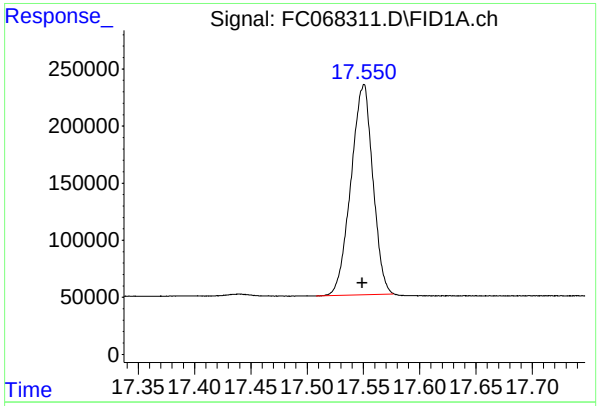

#15 n-Hexacosane (C26)

R.T.: 15.714 min
Delta R.T.: 0.000 min
Response: 2468793
Conc: 20.30 ug/ml




#16 n-Octacosane (C28)

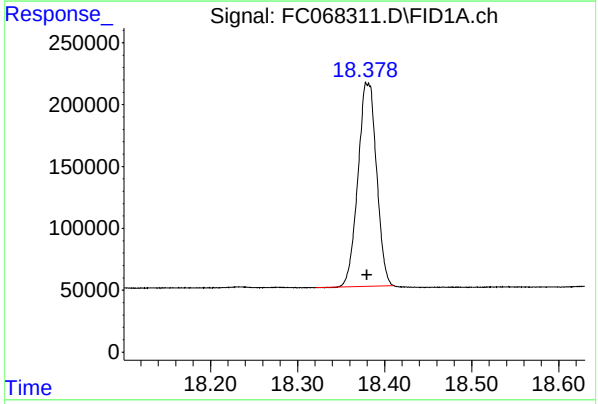
R.T.: 16.663 min
Delta R.T.: 0.001 min
Response: 2423834
Conc: 20.41 ug/ml




#17 n-Tricontane (C30)

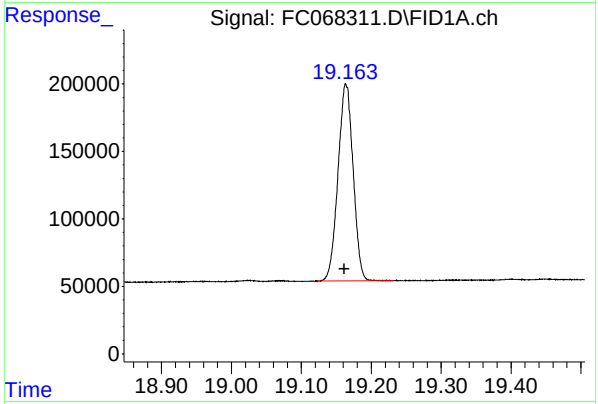
R.T.: 17.550 min
Delta R.T.: 0.000 min
Response: 2494006
Conc: 20.72 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD



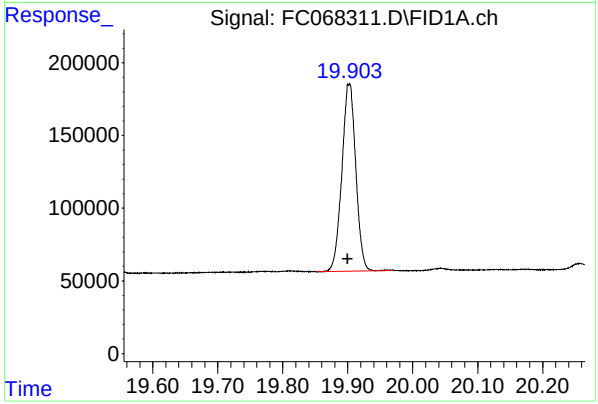

#18 n-Dotriacontane (C32)

R.T.: 18.381 min
Delta R.T.: 0.000 min
Response: 2439083
Conc: 21.01 ug/ml



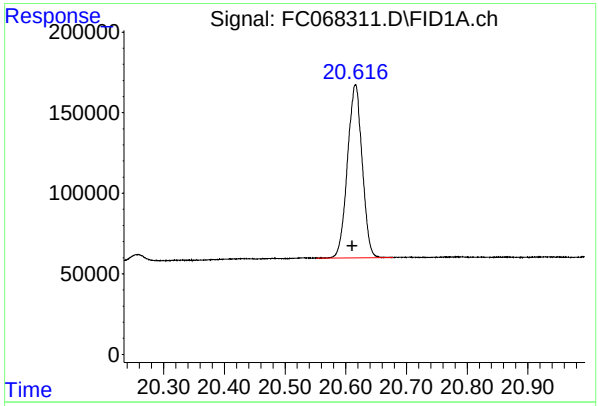

#19 n-Tetratriacontane (C34)

R.T.: 19.164 min
Delta R.T.: 0.003 min
Response: 2196747
Conc: 20.33 ug/ml




#20 n-Hexatriacontane (C36)

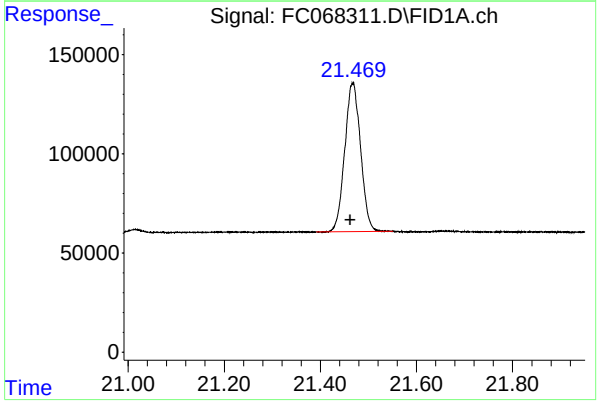
R.T.: 19.902 min
Delta R.T.: 0.002 min
Response: 1915492
Conc: 19.92 ug/ml




#21 n-Octatriacontane (C38)

R.T.: 20.616 min
Delta R.T.: 0.005 min
Response: 1807621
Conc: 20.11 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD




#22 n-Tetracontane (C40)

R.T.: 21.467 min
Delta R.T.: 0.005 min
Response: 1721919
Conc: 19.90 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022725AL\
Data File : FC068311.D
Signal(s) : FID1A.ch
Acq On : 27 Feb 2025 13:27
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Title : GC Extractables

Signal : FID1A.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 3.204 | 3.174 | 3.268 | BB | 341592 | 2828328 | 91.48% | 5.066% |
| 2 | 4.261 | 4.231 | 4.318 | BB | 316509 | 2864523 | 92.65% | 5.131% |
| 3 | 5.828 | 5.791 | 5.908 | BB | 330081 | 3091717 | 100.00% | 5.537% |
| 4 | 6.270 | 6.238 | 6.341 | BB | 290156 | 2831960 | 91.60% | 5.072% |
| 5 | 6.880 | 6.848 | 6.974 | BB | 288456 | 2921670 | 94.50% | 5.233% |
| 6 | 8.058 | 8.028 | 8.124 | BB | 260613 | 2729412 | 88.28% | 4.889% |
| 7 | 9.654 | 9.618 | 9.724 | BB | 249024 | 2751634 | 89.00% | 4.928% |
| 8 | 11.093 | 11.054 | 11.158 | BB | 231690 | 2749117 | 88.92% | 4.924% |
| 9 | 11.397 | 11.358 | 11.474 | BB | 288087 | 3033346 | 98.11% | 5.433% |
| 10 | 12.398 | 12.361 | 12.468 | BB | 216464 | 2618262 | 84.69% | 4.689% |
| 11 | 12.840 | 12.801 | 12.908 | BB | 179831 | 2221647 | 71.86% | 3.979% |
| 12 | 13.009 | 12.971 | 13.081 | BB | 212373 | 2563147 | 82.90% | 4.591% |
| 13 | 13.594 | 13.558 | 13.668 | BB | 208923 | 2536870 | 82.05% | 4.544% |
| 14 | 14.695 | 14.628 | 14.768 | BB | 188394 | 2513548 | 81.30% | 4.502% |
| 15 | 15.714 | 15.651 | 15.784 | BB | 189252 | 2468793 | 79.85% | 4.422% |
| 16 | 16.663 | 16.598 | 16.731 | BB | 178710 | 2448815 | 79.21% | 4.386% |
| 17 | 17.550 | 17.481 | 17.618 | BB | 187679 | 2537173 | 82.06% | 4.544% |
| 18 | 18.381 | 18.308 | 18.448 | BB | 164302 | 2481040 | 80.25% | 4.444% |
| 19 | 19.164 | 19.121 | 19.231 | BB | 145604 | 2196747 | 71.05% | 3.935% |
| 20 | 19.902 | 19.851 | 19.969 | BBA | 129880 | 1915492 | 61.96% | 3.431% |
| 21 | 20.616 | 20.551 | 20.678 | BB | 107507 | 1807621 | 58.47% | 3.238% |
| 22 | 21.467 | 21.391 | 21.551 | BB | 74833 | 1721919 | 55.69% | 3.084% |
| | | | Sum of corrected areas: | | | 55832780 | | |

Aliphatic EPH 021125.M Fri Feb 28 01:10:06 2025

Evaluate Continuing Calibration Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022725AL\
Data File : FC068311.D
Signal(s) : FID1A.ch
Acq On : 27 Feb 2025 13:27
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
FID_C
**LabSampleId :**
20 PPM ALIPHATIC HC STD

Integration File: autoint1.e
Quant Time: Mar 05 04:44:23 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 1 | T | n-Nonane (C9) | 140.677 | 141.416 E3 | -0.5 | 100 | 0.00 |
| 2 | T | n-Decane (C10) | 141.671 | 143.226 E3 | -1.1 | 100 | 0.00 |
| 3 | T | A~Naphthalene (C11.7) | 153.034 | 154.586 E3 | -1.0 | 100 | 0.00 |
| 4 | T | n-Dodecane (C12) | 140.758 | 141.598 E3 | -0.6 | 100 | 0.00 |
| 5 | T | A~2-methylnaphthalene (C12. | 144.828 | 146.084 E3 | -0.9 | 100 | 0.00 |
| 6 | T | n-Tetradecane (C14) | 136.344 | 136.471 E3 | -0.1 | 100 | 0.00 |
| 7 | T | n-Hexadecane (C16) | 136.965 | 137.582 E3 | -0.5 | 100 | 0.00 |
| 8 | T | n-Octadecane (C18) | 136.758 | 137.456 E3 | -0.5 | 100 | 0.00 |
| 9 | S | ortho-Terphenyl (SURR) | 153.444 | 151.667 E3 | 1.2 | 99 | 0.00 |
| 10 | T | n-Eicosane (C20) | 130.287 | 130.913 E3 | -0.5 | 100 | 0.00 |
| 11 | T | n-Heneicosane (C21) | 127.847 | 128.157 E3 | -0.2 | 100 | 0.00 |
| 12 | S | 1-chlorooctadecane (SURR) | 112.474 | 111.082 E3 | 1.2 | 98 | 0.00 |
| 13 | T | n-Docosane (C22) | 126.028 | 126.843 E3 | -0.6 | 100 | 0.00 |
| 14 | T | n-Tetracosane (C24) | 124.377 | 125.677 E3 | -1.0 | 101 | 0.00 |
| 15 | T | n-Hexacosane (C26) | 121.593 | 123.440 E3 | -1.5 | 101 | 0.00 |
| 16 | T | n-Octacosane (C28) | 118.767 | 121.192 E3 | -2.0 | 102 | 0.00 |
| 17 | T | n-Tricontane (C30) | 120.366 | 124.700 E3 | -3.6 | 104 | 0.00 |
| 18 | T | n-Dotriacontane (C32) | 116.067 | 121.954 E3 | -5.1 | 106 | 0.00 |
| 19 | T | n-Tetratriacontane (C34) | 108.059 | 109.837 E3 | -1.6 | 102 | 0.00 |
| 20 | T | n-Hexatriacontane (C36) | 96.169 | 95.775 E3 | 0.4 | 100 | 0.00 |
| 21 | T | n-Octatriacontane (C38) | 89.898 | 90.381 E3 | -0.5 | 100 | 0.00 |
| 22 | T | n-Tetracontane (C40) | 86.520 | 86.096 E3 | 0.5 | 99 | 0.00 |

Evaluate Continuing Calibration Report - Not Founds

---

(#) = Out of Range SPCC's out = 0 CCC's out = 0

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

# Continuing Calibration Report for SequenceID : FC022725AL

| Parameter | AreaCount | Conc. | RT_Min | RT_Max | Response Factor | AVGRF | %DEV |
|---|---|---|---|---|---|---|---|
| **File ID :** | **FC068318.D** | | | | | | |
| Aliphatic C9-C12 | 8436284.000 | 60.000 | 3.104 | 6.370 | 140604.733 | 141035.502 | 0.305 |
| Aliphatic C12-C16 | 5417400.000 | 40.000 | 6.371 | 9.754 | 135435.000 | 136654.515 | 0.892 |
| Aliphatic C16-C21 | 7834817.000 | 60.000 | 9.755 | 13.108 | 130580.283 | 131630.895 | 0.798 |
| Aliphatic C21-C28 | 9866523.000 | 80.000 | 13.109 | 16.762 | 123331.538 | 122691.322 | -0.522 |
| Aliphatic C28-C40 | 12696532.000 | 120.000 | 16.763 | 21.566 | 105804.433 | 102846.462 | -2.876 |
| Aliphatic EPH | 44251556.000 | 360.000 | 3.104 | 21.566 | 122920.989 | 122175.127 | -0.610 |

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

| | | | |
|---|---|---|---|
| Lab Sample ID: | 20 PPM ALIPHATIC HC S | Acq On: | 27 Feb 2025 17:45 |
| Client Sample ID: | | Operator: | YP/AJ |
| Data file: | FC068318.D | Misc: | |
| Instrument: | FID_C | ALS Vial: | 2 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | Units |
|---|---|---|---|---|---|
| Aliphatic C9-C12 | 3.104 | 6.370 | 8436284.000 | 60.000 | ug/ml |
| Aliphatic C12-C16 | 6.371 | 9.754 | 5417400.000 | 40.000 | ug/ml |
| Aliphatic C16-C21 | 9.755 | 13.108 | 7834817.000 | 60.000 | ug/ml |
| Aliphatic C21-C28 | 13.109 | 16.762 | 9866523.000 | 80.000 | ug/ml |
| Aliphatic C28-C40 | 16.763 | 21.566 | 12696532.000 | 120.000 | ug/ml |
| Aliphatic EPH | 3.104 | 21.566 | 44251556.000 | 360.000 | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022725AL\
Data File : FC068318.D
Signal(s) : FID1A.ch
Acq On : 27 Feb 2025 17:45
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD

Integration File: autoint1.e
Quant Time: Mar 05 04:45:18 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

| | Compound | R.T. | Response | Conc Units |
|---|---|---|---|---|
| | **System Monitoring Compounds** | | | |
| 9) | S ortho-Terphenyl (SURR) | 11.397 | 2998310 | 19.540 ug/ml |
| | Spiked Amount 50.000 | | Recovery = 39.08% | |
| 12) | S 1-chlorooctadecane (S... | 12.839 | 2199645 | 19.557 ug/ml |
| | Spiked Amount 50.000 | | Recovery = 39.11% | |
| | **Target Compounds** | | | |
| 1) | T n-Nonane (C9) | 3.204 | 2799079 | 19.897 ug/ml |
| 2) | T n-Decane (C10) | 4.261 | 2837196 | 20.027 ug/ml |
| 3) | T A~Naphthalene (C11.7) | 5.828 | 3054629 | 19.960 ug/ml |
| 4) | T n-Dodecane (C12) | 6.270 | 2800009 | 19.892 ug/ml |
| 5) | T A~2-methylnaphthalene... | 6.880 | 2884281 | 19.915 ug/ml |
| 6) | T n-Tetradecane (C14) | 8.058 | 2698892 | 19.795 ug/ml |
| 7) | T n-Hexadecane (C16) | 9.654 | 2718508 | 19.848 ug/ml |
| 8) | T n-Octadecane (C18) | 11.092 | 2713358 | 19.841 ug/ml |
| 10) | T n-Eicosane (C20) | 12.399 | 2584016 | 19.833 ug/ml |
| 11) | T n-Heneicosane (C21) | 13.009 | 2537443 | 19.847 ug/ml |
| 13) | T n-Docosane (C22) | 13.594 | 2507247 | 19.894 ug/ml |
| 14) | T n-Tetracosane (C24) | 14.695 | 2490334 | 20.022 ug/ml |
| 15) | T n-Hexacosane (C26) | 15.713 | 2448205 | 20.134 ug/ml |
| 16) | T n-Octacosane (C28) | 16.663 | 2420737 | 20.382 ug/ml |
| 17) | T n-Tricontane (C30) | 17.549 | 2520575 | 20.941 ug/ml |
| 18) | T n-Dotriacontane (C32) | 18.380 | 2479162 | 21.360 ug/ml |
| 19) | T n-Tetratriacontane (C34) | 19.163 | 2226154 | 20.601 ug/ml |
| 20) | T n-Hexatriacontane (C36) | 19.902 | 1928913 | 20.058 ug/ml |
| 21) | T n-Octatriacontane (C38) | 20.615 | 1817481 | 20.217 ug/ml |
| 22) | T n-Tetracontane (C40) | 21.469 | 1724247 | 19.929 ug/ml |

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

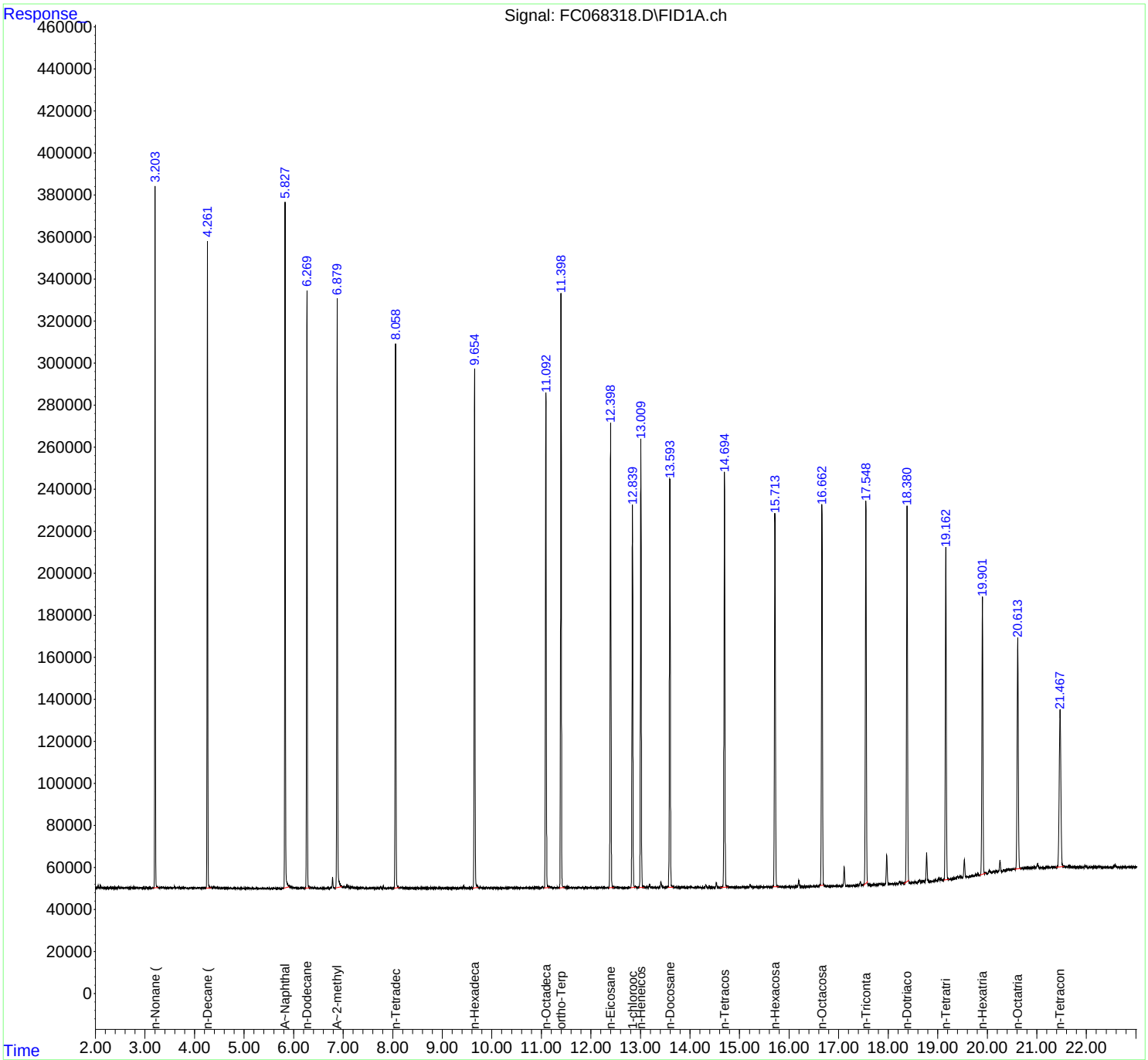
Quantitation Report (QT Reviewed)

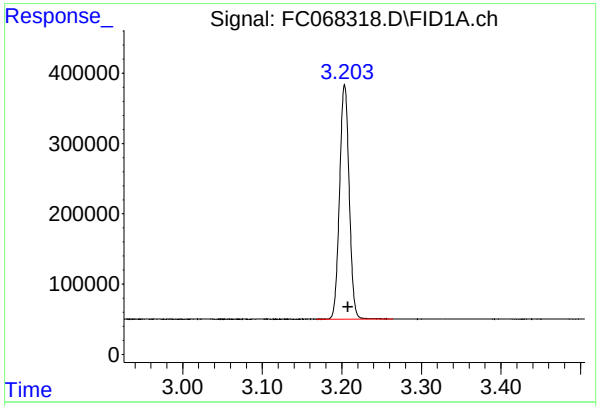
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022725AL\
Data File : FC068318.D
Signal(s) : FID1A.ch
Acq On : 27 Feb 2025 17:45
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD

Integration File: autoint1.e
Quant Time: Mar 05 04:45:18 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

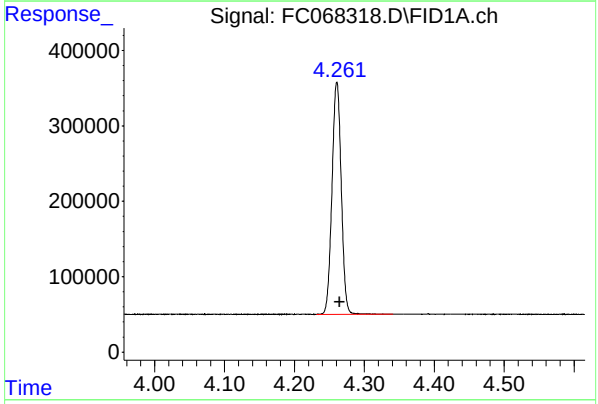





#1 n-Nonane (C9)

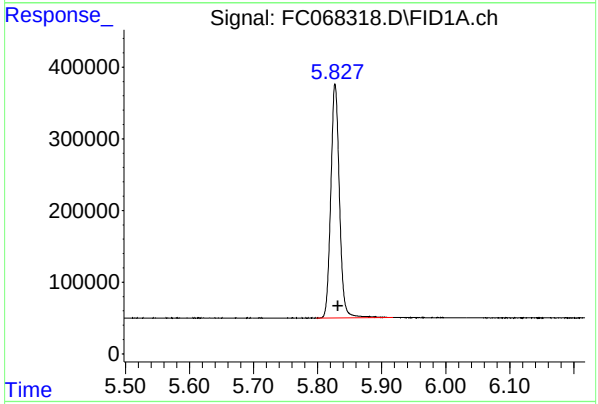
R.T.: 3.204 min
Delta R.T.: -0.004 min
Response: 2799079
Conc: 19.90 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD



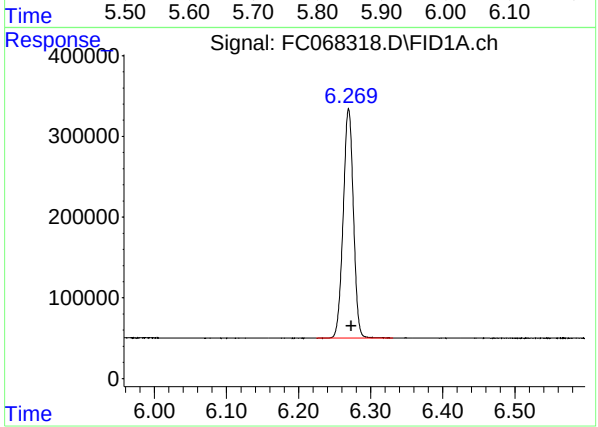

#2 n-Decane (C10)

R.T.: 4.261 min
Delta R.T.: -0.004 min
Response: 2837196
Conc: 20.03 ug/ml



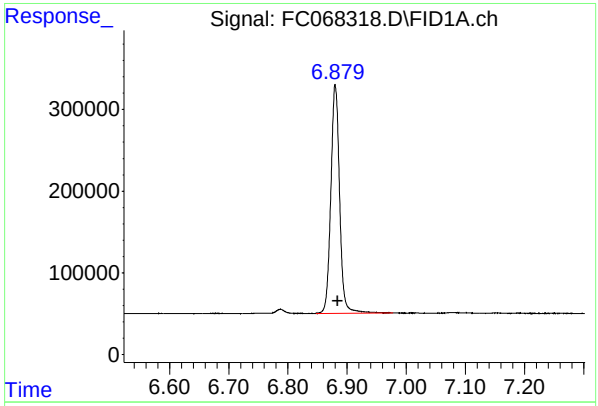

#3 A~Naphthalene (C11.7)

R.T.: 5.828 min
Delta R.T.: -0.004 min
Response: 3054629
Conc: 19.96 ug/ml




#4 n-Dodecane (C12)

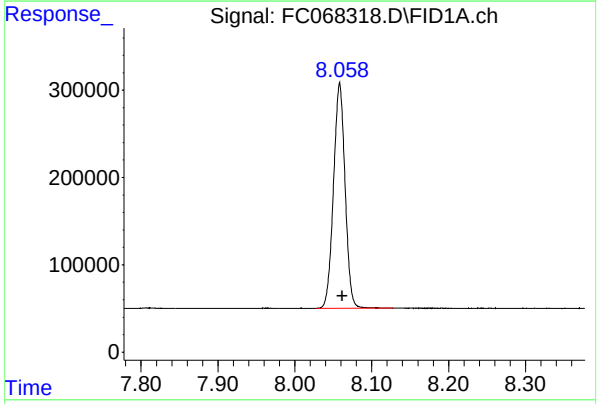
R.T.: 6.270 min
Delta R.T.: -0.004 min
Response: 2800009
Conc: 19.89 ug/ml




#5 A~2-methylnaphthalene (C12.89)

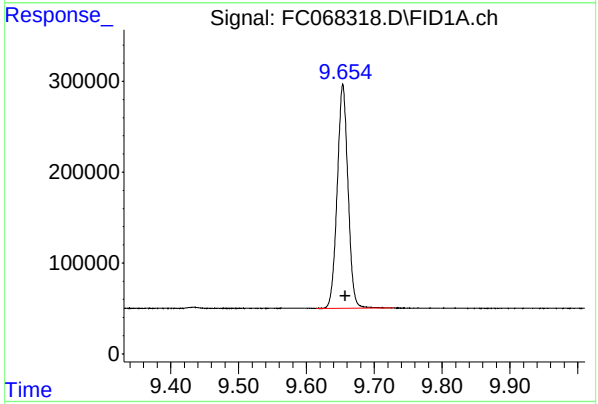
R.T.: 6.880 min
Delta R.T.: -0.004 min
Response: 2884281
Conc: 19.92 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD



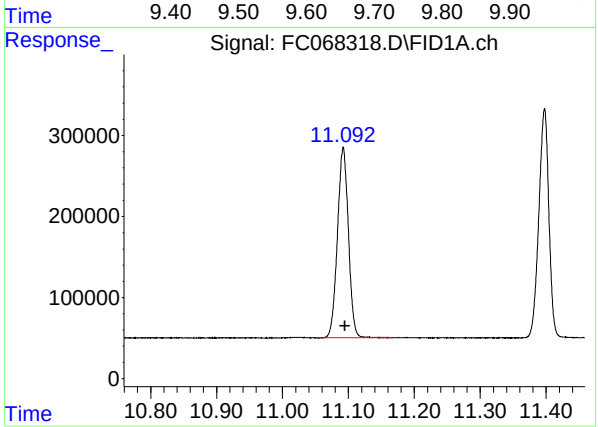

#6 n-Tetradecane (C14)

R.T.: 8.058 min
Delta R.T.: -0.003 min
Response: 2698892
Conc: 19.79 ug/ml



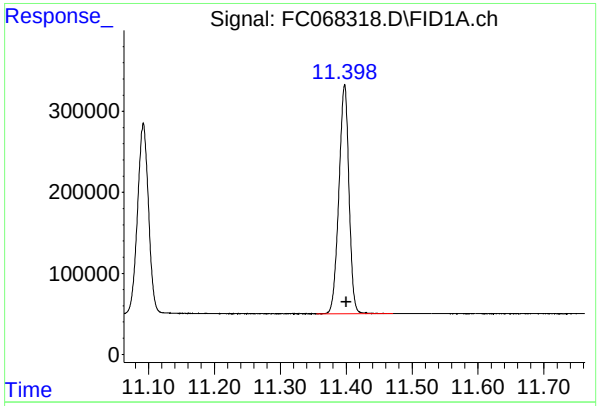

#7 n-Hexadecane (C16)

R.T.: 9.654 min
Delta R.T.: -0.004 min
Response: 2718508
Conc: 19.85 ug/ml




#8 n-Octadecane (C18)

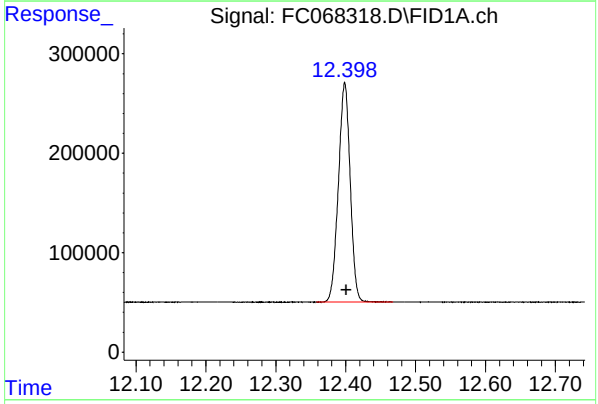
R.T.: 11.092 min
Delta R.T.: -0.002 min
Response: 2713358
Conc: 19.84 ug/ml




#9 ortho-Terphenyl (SURR)

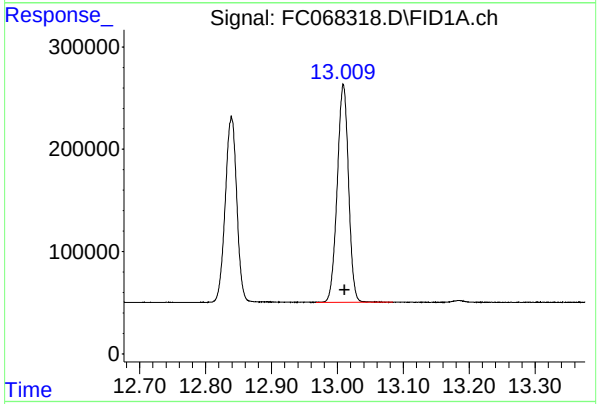
R.T.: 11.397 min
Delta R.T.: -0.002 min
Response: 2998310
Conc: 19.54 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD



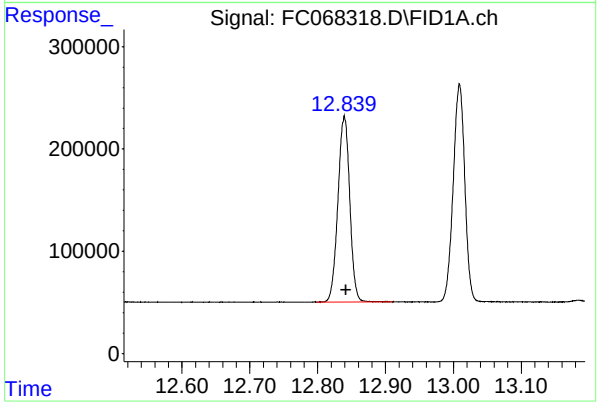

#10 n-Eicosane (C20)

R.T.: 12.399 min
Delta R.T.: -0.002 min
Response: 2584016
Conc: 19.83 ug/ml



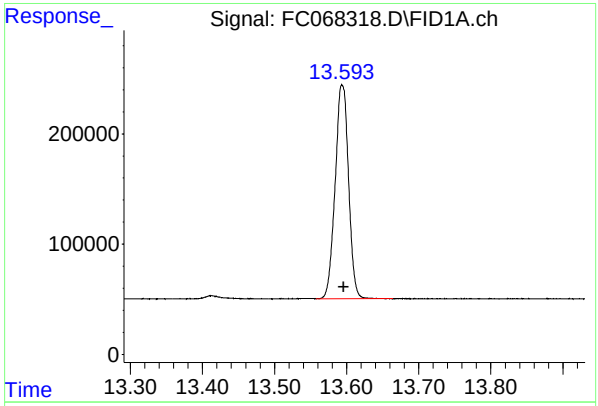

#11 n-Heneicosane (C21)

R.T.: 13.009 min
Delta R.T.: -0.002 min
Response: 2537443
Conc: 19.85 ug/ml




#12 1-chlorooctadecane (SURR)

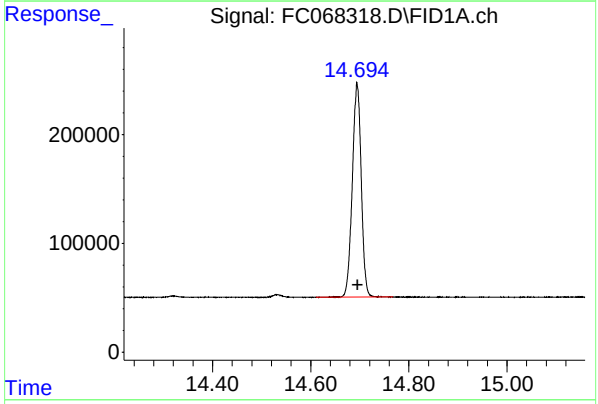
R.T.: 12.839 min
Delta R.T.: -0.002 min
Response: 2199645
Conc: 19.56 ug/ml




#13 n-Docosane (C22)

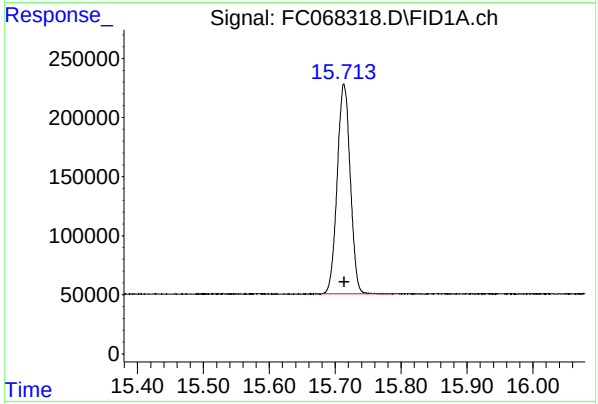
R.T.: 13.594 min
Delta R.T.: -0.002 min
Response: 2507247
Conc: 19.89 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD



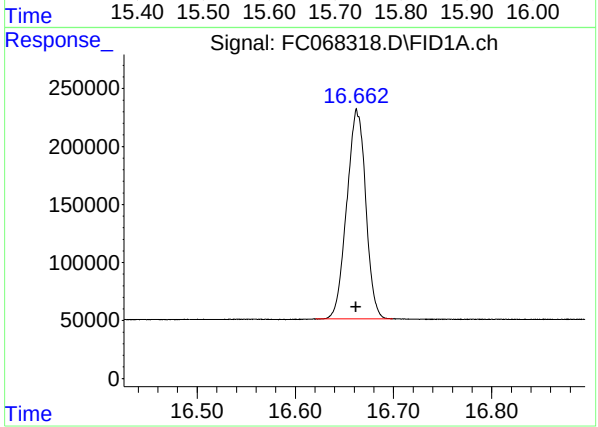

#14 n-Tetracosane (C24)

R.T.: 14.695 min
Delta R.T.: -0.001 min
Response: 2490334
Conc: 20.02 ug/ml



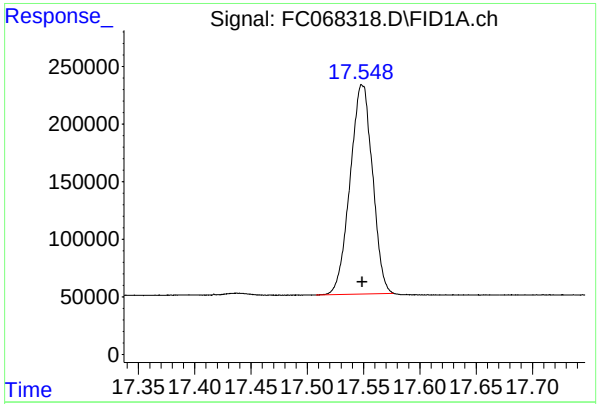

#15 n-Hexacosane (C26)

R.T.: 15.713 min
Delta R.T.: 0.000 min
Response: 2448205
Conc: 20.13 ug/ml




#16 n-Octacosane (C28)

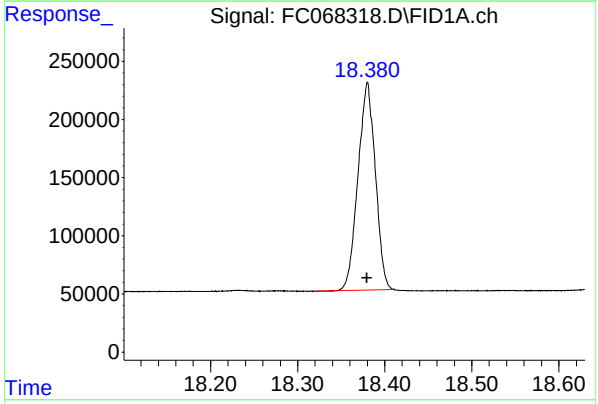
R.T.: 16.663 min
Delta R.T.: 0.000 min
Response: 2420737
Conc: 20.38 ug/ml




#17 n-Tricontane (C30)

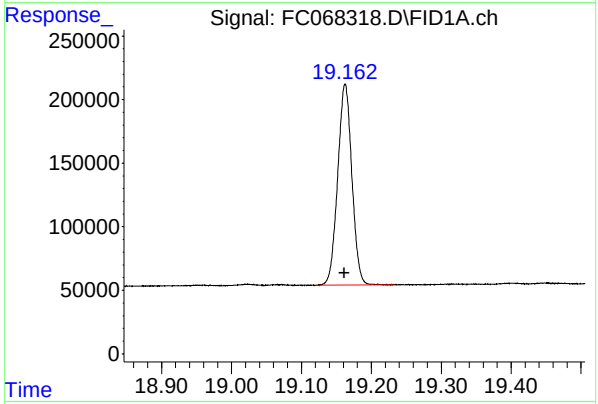
R.T.: 17.549 min
Delta R.T.: 0.000 min
Response: 2520575
Conc: 20.94 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD



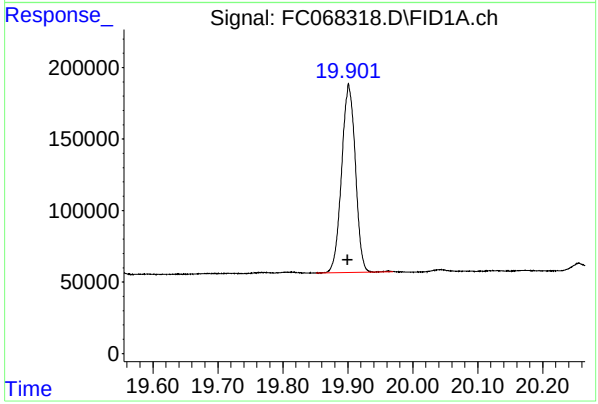

#18 n-Dotriacontane (C32)

R.T.: 18.380 min
Delta R.T.: 0.000 min
Response: 2479162
Conc: 21.36 ug/ml



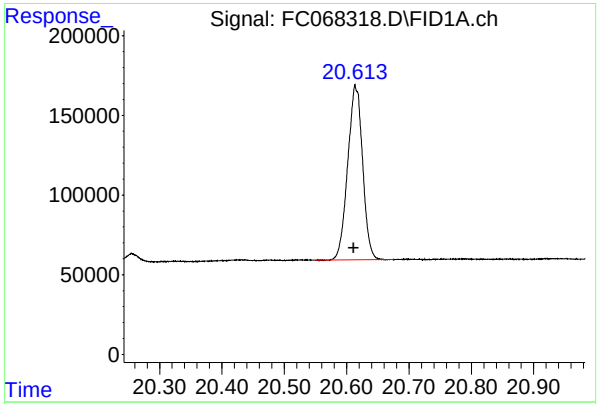

#19 n-Tetratriacontane (C34)

R.T.: 19.163 min
Delta R.T.: 0.001 min
Response: 2226154
Conc: 20.60 ug/ml




#20 n-Hexatriacontane (C36)

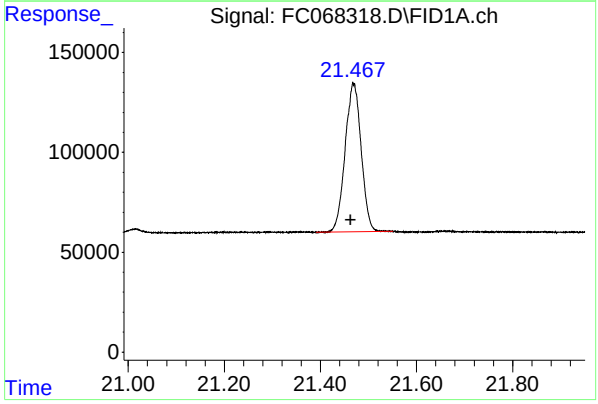
R.T.: 19.902 min
Delta R.T.: 0.001 min
Response: 1928913
Conc: 20.06 ug/ml




#21 n-Octatriacontane (C38)

R.T.: 20.615 min
Delta R.T.: 0.004 min
Response: 1817481
Conc: 20.22 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD




#22 n-Tetracontane (C40)

R.T.: 21.469 min
Delta R.T.: 0.006 min
Response: 1724247
Conc: 19.93 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022725AL\
Data File : FC068318.D
Signal(s) : FID1A.ch
Acq On : 27 Feb 2025 17:45
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Title : GC Extractables

Signal : FID1A.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 3.204 | 3.168 | 3.264 | BB | 333557 | 2799079 | 91.63% | 5.044% |
| 2 | 4.261 | 4.231 | 4.341 | BB | 308500 | 2837196 | 92.88% | 5.112% |
| 3 | 5.828 | 5.798 | 5.918 | BB | 325941 | 3054629 | 100.00% | 5.504% |
| 4 | 6.270 | 6.224 | 6.331 | BB | 283493 | 2800009 | 91.66% | 5.045% |
| 5 | 6.880 | 6.848 | 6.978 | BB | 278159 | 2884281 | 94.42% | 5.197% |
| 6 | 8.058 | 8.028 | 8.128 | BB | 256350 | 2698892 | 88.35% | 4.863% |
| 7 | 9.654 | 9.614 | 9.728 | BB | 245999 | 2718508 | 89.00% | 4.898% |
| 8 | 11.092 | 11.051 | 11.168 | BB | 233055 | 2713358 | 88.83% | 4.889% |
| 9 | 11.397 | 11.354 | 11.471 | BB | 283738 | 2998310 | 98.16% | 5.402% |
| 10 | 12.399 | 12.358 | 12.468 | BB | 219323 | 2584016 | 84.59% | 4.656% |
| 11 | 12.839 | 12.798 | 12.911 | BB | 180327 | 2199645 | 72.01% | 3.963% |
| 12 | 13.009 | 12.968 | 13.084 | BB | 211236 | 2537443 | 83.07% | 4.572% |
| 13 | 13.594 | 13.558 | 13.664 | BB | 193882 | 2507247 | 82.08% | 4.518% |
| 14 | 14.695 | 14.611 | 14.768 | BB | 195969 | 2490334 | 81.53% | 4.487% |
| 15 | 15.713 | 15.671 | 15.788 | BB | 176630 | 2448205 | 80.15% | 4.411% |
| 16 | 16.663 | 16.598 | 16.738 | BB | 178217 | 2444014 | 80.01% | 4.404% |
| 17 | 17.549 | 17.494 | 17.604 | BB | 183524 | 2555869 | 83.67% | 4.605% |
| 18 | 18.380 | 18.194 | 18.448 | BB | 178479 | 2530866 | 82.85% | 4.560% |
| 19 | 19.163 | 19.121 | 19.231 | BB | 157957 | 2226154 | 72.88% | 4.011% |
| 20 | 19.902 | 19.851 | 19.969 | BBA | 130666 | 1928913 | 63.15% | 3.476% |
| 21 | 20.615 | 20.551 | 20.674 | BB | 108793 | 1817481 | 59.50% | 3.275% |
| 22 | 21.469 | 21.391 | 21.551 | BB | 74547 | 1724247 | 56.45% | 3.107% |
| | | | Sum of corrected areas: | | | 55498695 | | |

Aliphatic EPH 021125.M Fri Feb 28 01:11:58 2025

Evaluate Continuing Calibration Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022725AL\
Data File : FC068318.D
Signal(s) : FID1A.ch
Acq On : 27 Feb 2025 17:45
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
FID_C
**LabSampleId :**
20 PPM ALIPHATIC HC STD

Integration File: autoint1.e
Quant Time: Mar 05 04:45:18 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 1 | T | n-Nonane (C9) | 140.677 | 139.954 E3 | 0.5 | 99 | 0.00 |
| 2 | T | n-Decane (C10) | 141.671 | 141.860 E3 | -0.1 | 99 | 0.00 |
| 3 | T | A~Naphthalene (C11.7) | 153.034 | 152.731 E3 | 0.2 | 99 | 0.00 |
| 4 | T | n-Dodecane (C12) | 140.758 | 140.000 E3 | 0.5 | 99 | 0.00 |
| 5 | T | A~2-methylnaphthalene (C12. | 144.828 | 144.214 E3 | 0.4 | 98 | 0.00 |
| 6 | T | n-Tetradecane (C14) | 136.344 | 134.945 E3 | 1.0 | 99 | 0.00 |
| 7 | T | n-Hexadecane (C16) | 136.965 | 135.925 E3 | 0.8 | 99 | 0.00 |
| 8 | T | n-Octadecane (C18) | 136.758 | 135.668 E3 | 0.8 | 99 | 0.00 |
| 9 | S | ortho-Terphenyl (SURR) | 153.444 | 149.915 E3 | 2.3 | 98 | 0.00 |
| 10 | T | n-Eicosane (C20) | 130.287 | 129.201 E3 | 0.8 | 99 | 0.00 |
| 11 | T | n-Heneicosane (C21) | 127.847 | 126.872 E3 | 0.8 | 99 | 0.00 |
| 12 | S | 1-chlorooctadecane (SURR) | 112.474 | 109.982 E3 | 2.2 | 97 | 0.00 |
| 13 | T | n-Docosane (C22) | 126.028 | 125.362 E3 | 0.5 | 99 | 0.00 |
| 14 | T | n-Tetracosane (C24) | 124.377 | 124.517 E3 | -0.1 | 100 | 0.00 |
| 15 | T | n-Hexacosane (C26) | 121.593 | 122.410 E3 | -0.7 | 100 | 0.00 |
| 16 | T | n-Octacosane (C28) | 118.767 | 121.037 E3 | -1.9 | 102 | 0.00 |
| 17 | T | n-Tricontane (C30) | 120.366 | 126.029 E3 | -4.7 | 105 | 0.00 |
| 18 | T | n-Dotriacontane (C32) | 116.067 | 123.958 E3 | -6.8 | 107 | 0.00 |
| 19 | T | n-Tetratriacontane (C34) | 108.059 | 111.308 E3 | -3.0 | 103 | 0.00 |
| 20 | T | n-Hexatriacontane (C36) | 96.169 | 96.446 E3 | -0.3 | 100 | 0.00 |
| 21 | T | n-Octatriacontane (C38) | 89.898 | 90.874 E3 | -1.1 | 101 | 0.00 |
| 22 | T | n-Tetracontane (C40) | 86.520 | 86.212 E3 | 0.4 | 99 | 0.00 |

Evaluate Continuing Calibration Report - Not Founds

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(#) = Out of Range SPCC's out = 0 CCC's out = 0

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

# Continuing Calibration Report for SequenceID : FC022825AL

| Parameter | AreaCount | Conc. | RT_Min | RT_Max | Response Factor | AVGRF | %DEV |
|---|---|---|---|---|---|---|---|
| **File ID :** | **FC068321.D** | | | | | | |
| Aliphatic C9-C12 | 8795568.000 | 60.000 | 3.104 | 6.369 | 146592.800 | 141035.502 | -3.940 |
| Aliphatic C12-C16 | 5630378.000 | 40.000 | 6.370 | 9.754 | 140759.450 | 136654.515 | -3.004 |
| Aliphatic C16-C21 | 8123361.000 | 60.000 | 9.755 | 13.107 | 135389.350 | 131630.895 | -2.855 |
| Aliphatic C21-C28 | 10221769.000 | 80.000 | 13.108 | 16.761 | 127772.113 | 122691.322 | -4.141 |
| Aliphatic C28-C40 | 13145019.000 | 120.000 | 16.762 | 21.565 | 109541.825 | 102846.462 | -6.510 |
| Aliphatic EPH | 45916095.000 | 360.000 | 3.104 | 21.565 | 127544.708 | 122175.127 | -4.395 |

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

| | | | |
|---|---|---|---|
| Lab Sample ID: | 20 PPM ALIPHATIC HC S | Acq On: | 28 Feb 2025 10:23 |
| Client Sample ID: | | Operator: | YP/AJ |
| Data file: | FC068321.D | Misc: | |
| Instrument: | FID_C | ALS Vial: | 2 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | Units |
|---|---|---|---|---|---|
| Aliphatic C9-C12 | 3.104 | 6.369 | 8795568.000 | 60.000 | ug/ml |
| Aliphatic C12-C16 | 6.370 | 9.754 | 5630378.000 | 40.000 | ug/ml |
| Aliphatic C16-C21 | 9.755 | 13.107 | 8123361.000 | 60.000 | ug/ml |
| Aliphatic C21-C28 | 13.108 | 16.761 | 10221769.000 | 80.000 | ug/ml |
| Aliphatic C28-C40 | 16.762 | 21.565 | 13145019.000 | 120.000 | ug/ml |
| Aliphatic EPH | 3.104 | 21.565 | 45916095.000 | 360.000 | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022825AL\
Data File : FC068321.D
Signal(s) : FID1A.ch
Acq On : 28 Feb 2025 10:23
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD

Integration File: autoint1.e
Quant Time: Mar 05 05:22:47 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

| | Compound | R.T. | Response | Conc Units |
|---|---|---|---|---|
| | **System Monitoring Compounds** | | | |
| 9) | S ortho-Terphenyl (SURR) | 11.396 | 3120216 | 20.335 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 40.67% |
| 12) | S 1-chlorooctadecane (S... | 12.838 | 2266768 | 20.154 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 40.31% |
| | **Target Compounds** | | | |
| 1) | T n-Nonane (C9) | 3.204 | 2921206 | 20.765 ug/ml |
| 2) | T n-Decane (C10) | 4.261 | 2957953 | 20.879 ug/ml |
| 3) | T A~Naphthalene (C11.7) | 5.828 | 3188598 | 20.836 ug/ml |
| 4) | T n-Dodecane (C12) | 6.269 | 2916409 | 20.719 ug/ml |
| 5) | T A~2-methylnaphthalene... | 6.880 | 2996735 | 20.692 ug/ml |
| 6) | T n-Tetradecane (C14) | 8.058 | 2804182 | 20.567 ug/ml |
| 7) | T n-Hexadecane (C16) | 9.654 | 2826196 | 20.634 ug/ml |
| 8) | T n-Octadecane (C18) | 11.092 | 2816962 | 20.598 ug/ml |
| 10) | T n-Eicosane (C20) | 12.398 | 2680291 | 20.572 ug/ml |
| 11) | T n-Heneicosane (C21) | 13.007 | 2626108 | 20.541 ug/ml |
| 13) | T n-Docosane (C22) | 13.593 | 2593669 | 20.580 ug/ml |
| 14) | T n-Tetracosane (C24) | 14.694 | 2570552 | 20.667 ug/ml |
| 15) | T n-Hexacosane (C26) | 15.712 | 2540397 | 20.893 ug/ml |
| 16) | T n-Octacosane (C28) | 16.661 | 2517151 | 21.194 ug/ml |
| 17) | T n-Tricontane (C30) | 17.547 | 2631751 | 21.865 ug/ml |
| 18) | T n-Dotriacontane (C32) | 18.379 | 2592060 | 22.332 ug/ml |
| 19) | T n-Tetratriacontane (C34) | 19.161 | 2321702 | 21.486 ug/ml |
| 20) | T n-Hexatriacontane (C36) | 19.900 | 2007468 | 20.874 ug/ml |
| 21) | T n-Octatriacontane (C38) | 20.612 | 1863761 | 20.732 ug/ml |
| 22) | T n-Tetracontane (C40) | 21.465 | 1728277 | 19.975 ug/ml |

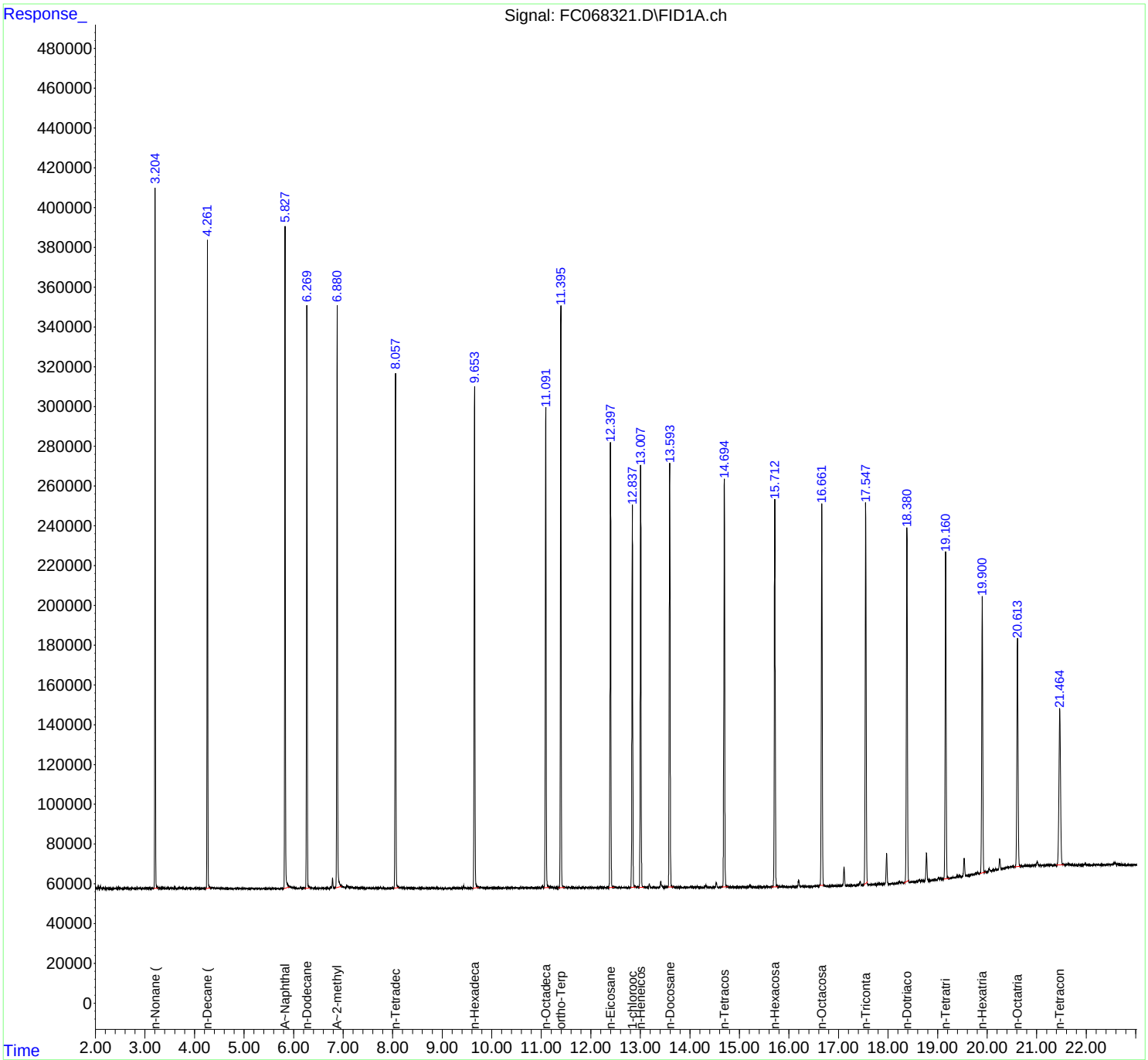
(f)=RT Delta > 1/2 Window (m)=manual int.

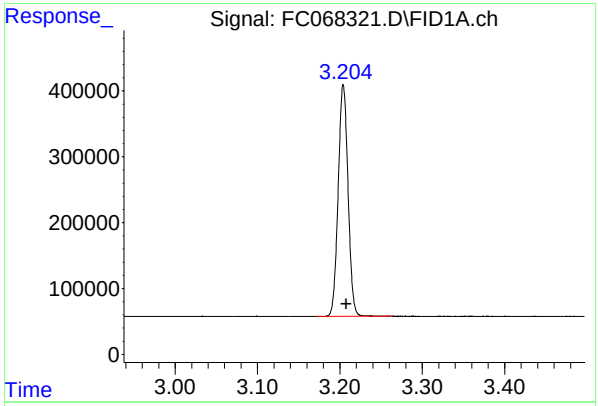
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022825AL\
Data File : FC068321.D
Signal(s) : FID1A.ch
Acq On : 28 Feb 2025 10:23
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD

Integration File: autoint1.e
Quant Time: Mar 05 05:22:47 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

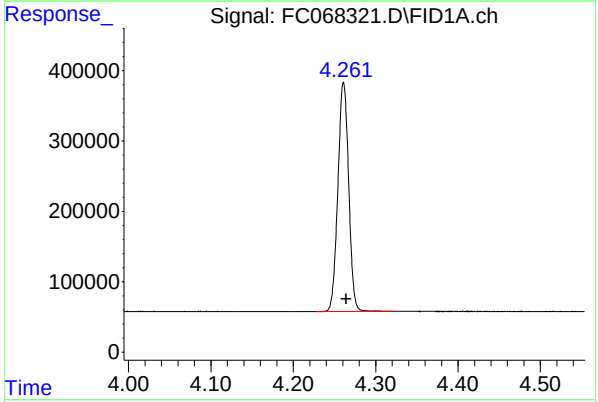





#1 n-Nonane (C9)

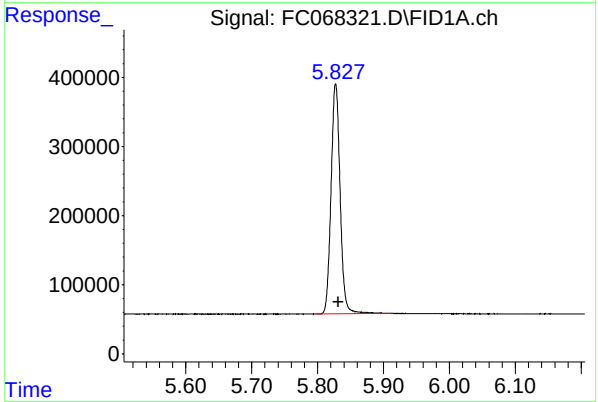
R.T.: 3.204 min
Delta R.T.: -0.004 min
Response: 2921206
Conc: 20.77 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD



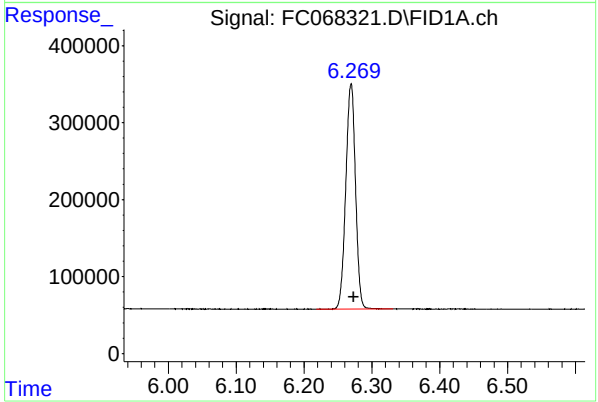

#2 n-Decane (C10)

R.T.: 4.261 min
Delta R.T.: -0.004 min
Response: 2957953
Conc: 20.88 ug/ml



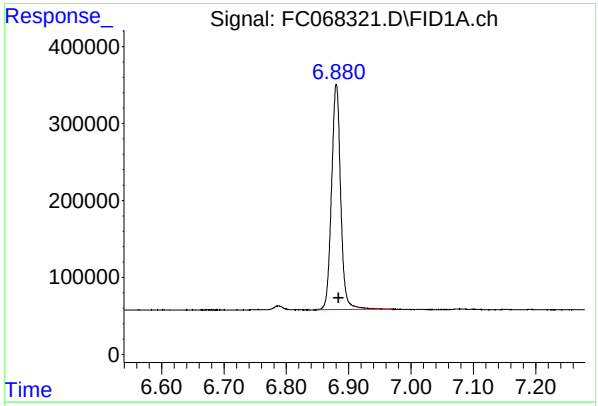

#3 A~Naphthalene (C11.7)

R.T.: 5.828 min
Delta R.T.: -0.004 min
Response: 3188598
Conc: 20.84 ug/ml




#4 n-Dodecane (C12)

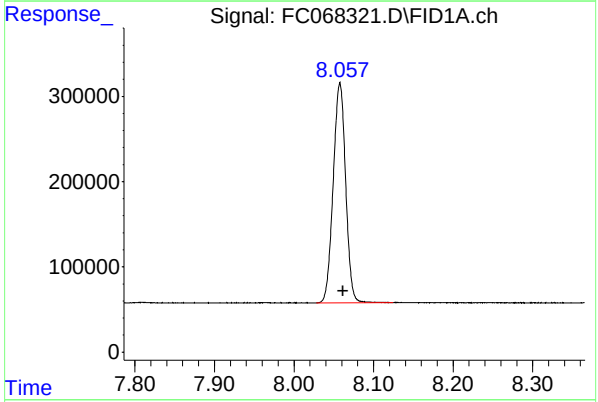
R.T.: 6.269 min
Delta R.T.: -0.004 min
Response: 2916409
Conc: 20.72 ug/ml




#5 A~2-methylnaphthalene (C12.89)

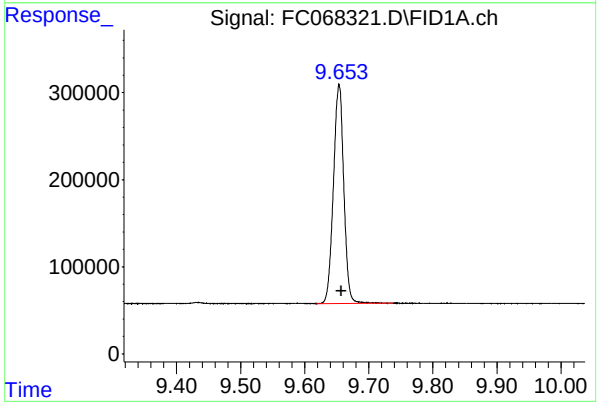
R.T.: 6.880 min
Delta R.T.: -0.004 min
Response: 2996735
Conc: 20.69 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD



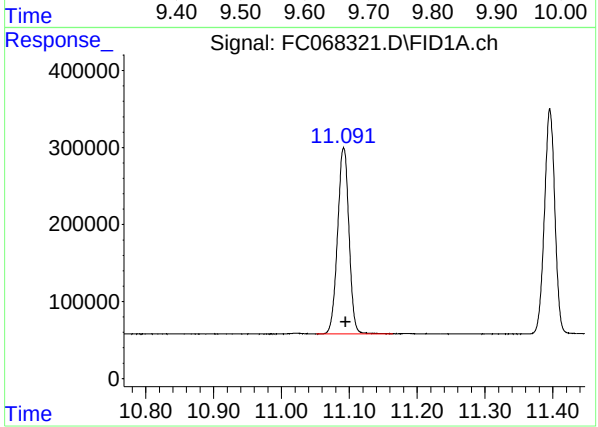

#6 n-Tetradecane (C14)

R.T.: 8.058 min
Delta R.T.: -0.004 min
Response: 2804182
Conc: 20.57 ug/ml



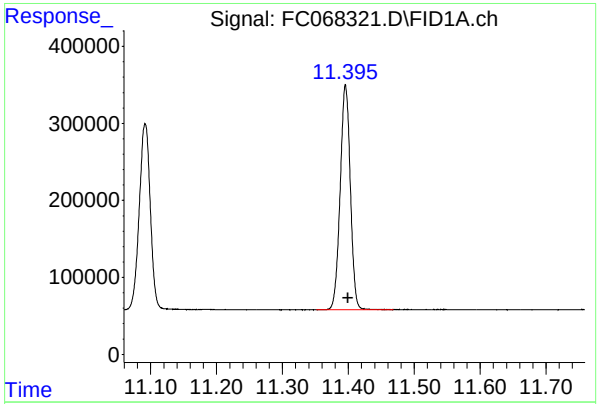

#7 n-Hexadecane (C16)

R.T.: 9.654 min
Delta R.T.: -0.004 min
Response: 2826196
Conc: 20.63 ug/ml




#8 n-Octadecane (C18)

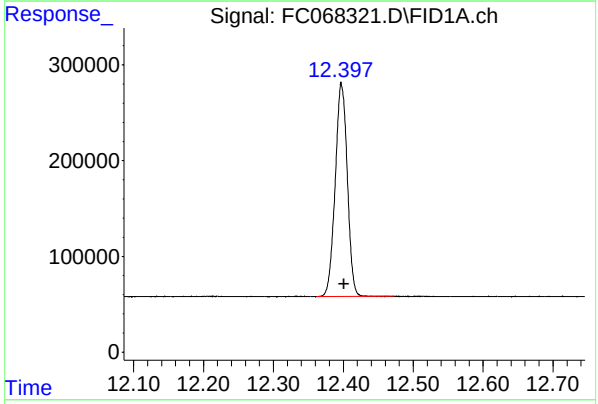
R.T.: 11.092 min
Delta R.T.: -0.003 min
Response: 2816962
Conc: 20.60 ug/ml




#9 ortho-Terphenyl (SURR)

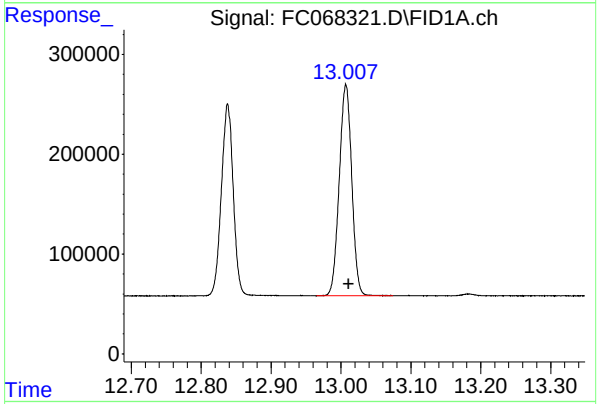
R.T.: 11.396 min
Delta R.T.: -0.004 min
Response: 3120216
Conc: 20.33 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD



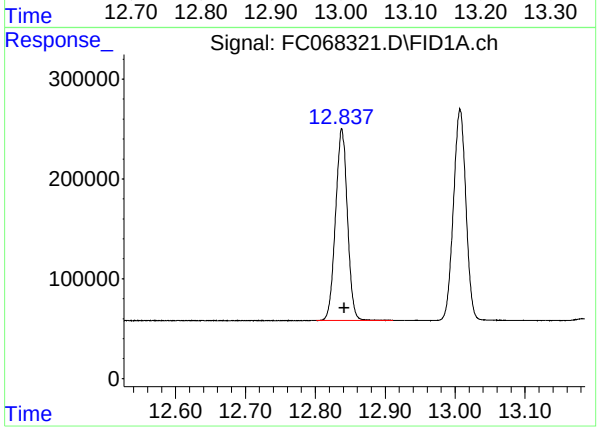

#10 n-Eicosane (C20)

R.T.: 12.398 min
Delta R.T.: -0.003 min
Response: 2680291
Conc: 20.57 ug/ml



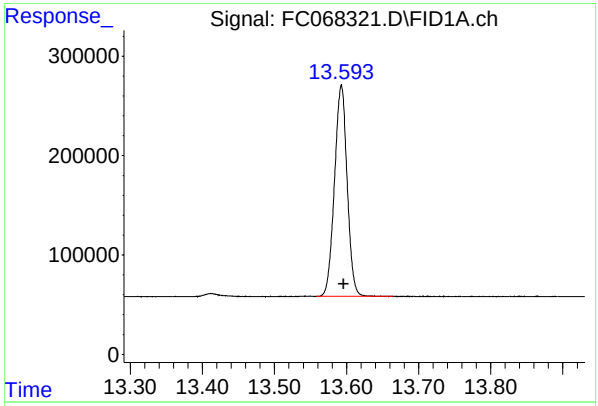

#11 n-Heneicosane (C21)

R.T.: 13.007 min
Delta R.T.: -0.004 min
Response: 2626108
Conc: 20.54 ug/ml




#12 1-chlorooctadecane (SURR)

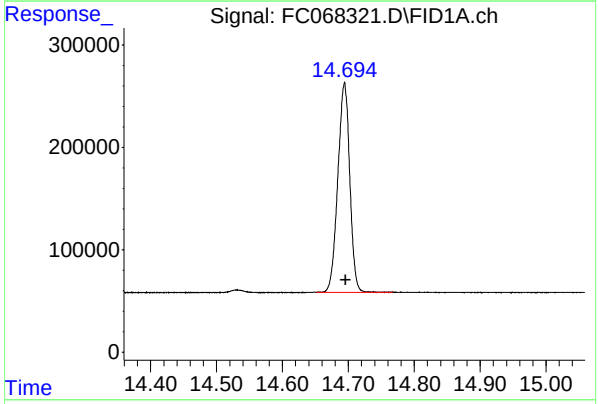
R.T.: 12.838 min
Delta R.T.: -0.004 min
Response: 2266768
Conc: 20.15 ug/ml




#13 n-Docosane (C22)

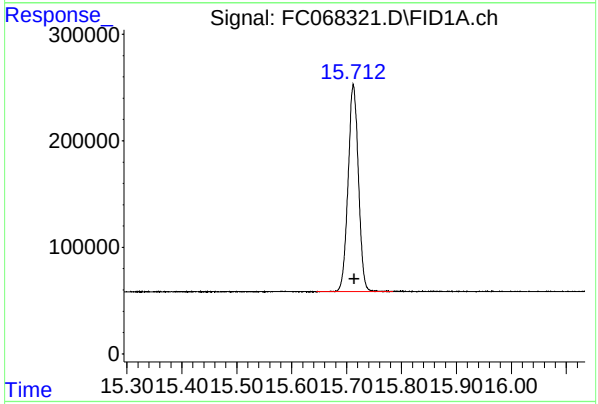
R.T.: 13.593 min
Delta R.T.: -0.003 min
Response: 2593669
Conc: 20.58 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD



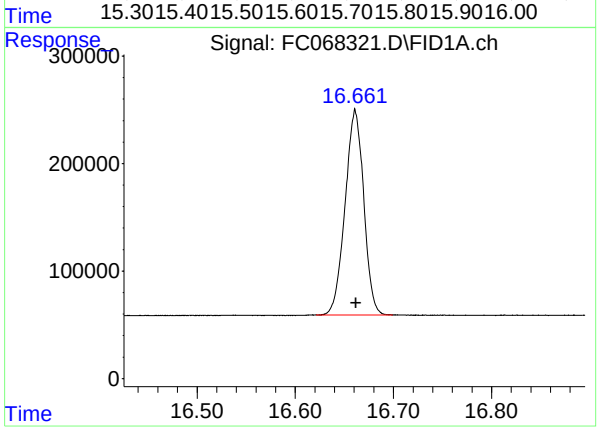

#14 n-Tetracosane (C24)

R.T.: 14.694 min
Delta R.T.: -0.002 min
Response: 2570552
Conc: 20.67 ug/ml



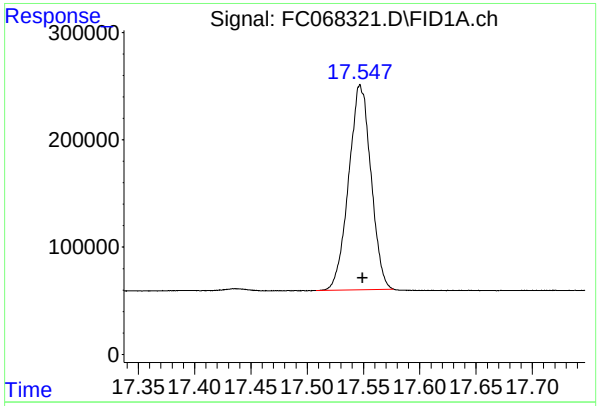

#15 n-Hexacosane (C26)

R.T.: 15.712 min
Delta R.T.: -0.002 min
Response: 2540397
Conc: 20.89 ug/ml




#16 n-Octacosane (C28)

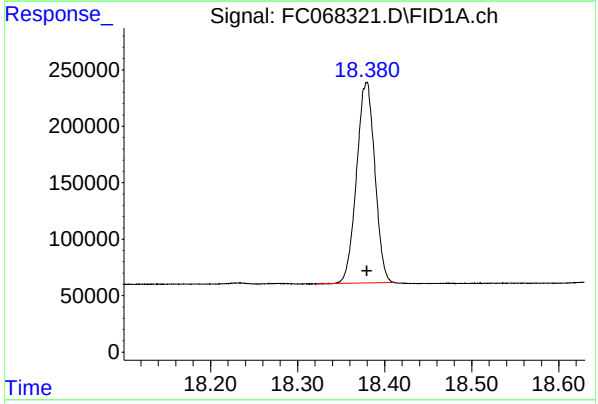
R.T.: 16.661 min
Delta R.T.: -0.001 min
Response: 2517151
Conc: 21.19 ug/ml




#17 n-Tricontane (C30)

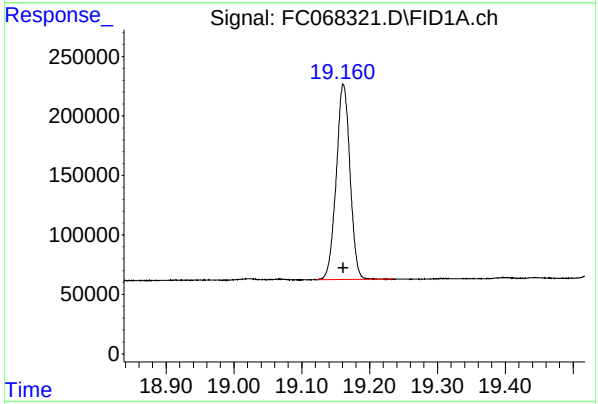
R.T.: 17.547 min
Delta R.T.: -0.002 min
Response: 2631751
Conc: 21.86 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD



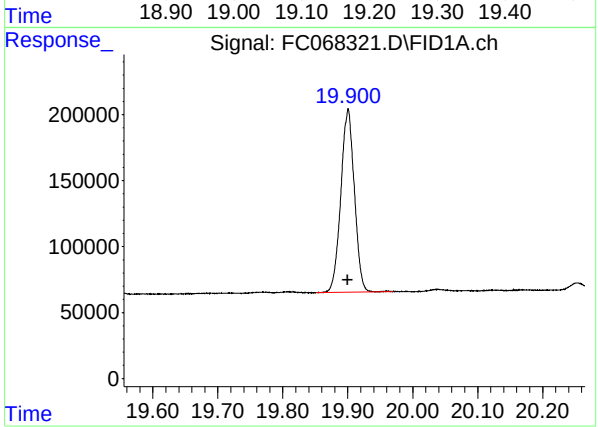

#18 n-Dotriacontane (C32)

R.T.: 18.379 min
Delta R.T.: 0.000 min
Response: 2592060
Conc: 22.33 ug/ml



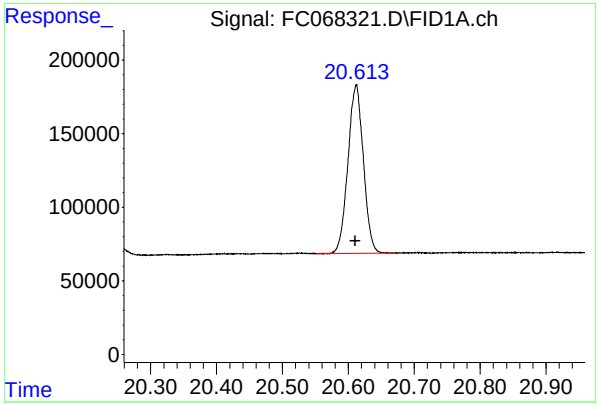

#19 n-Tetratriacontane (C34)

R.T.: 19.161 min
Delta R.T.: 0.000 min
Response: 2321702
Conc: 21.49 ug/ml




#20 n-Hexatriacontane (C36)

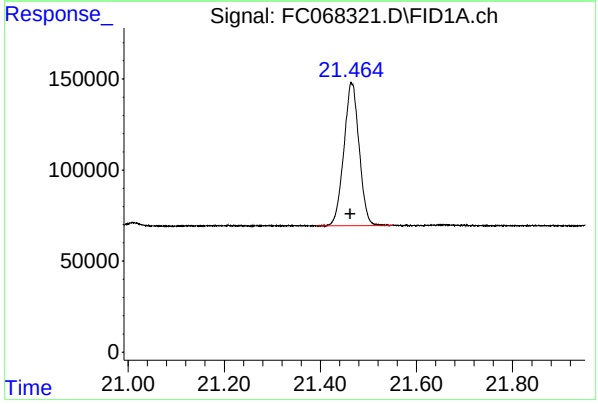
R.T.: 19.900 min
Delta R.T.: 0.000 min
Response: 2007468
Conc: 20.87 ug/ml




#21 n-Octatriacontane (C38)

R.T.: 20.612 min
Delta R.T.: 0.000 min
Response: 1863761
Conc: 20.73 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD




#22 n-Tetracontane (C40)

R.T.: 21.465 min
Delta R.T.: 0.003 min
Response: 1728277
Conc: 19.98 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022825AL\
Data File : FC068321.D
Signal(s) : FID1A.ch
Acq On : 28 Feb 2025 10:23
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Title : GC Extractables

Signal : FID1A.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 3.204 | 3.171 | 3.264 | BB | 351210 | 2921206 | 91.61% | 5.074% |
| 2 | 4.261 | 4.228 | 4.321 | BB | 325775 | 2957953 | 92.77% | 5.138% |
| 3 | 5.828 | 5.798 | 5.914 | BB | 332892 | 3188598 | 100.00% | 5.539% |
| 4 | 6.269 | 6.218 | 6.331 | BB | 291281 | 2916409 | 91.46% | 5.066% |
| 5 | 6.880 | 6.848 | 6.971 | BB | 293726 | 2996735 | 93.98% | 5.205% |
| 6 | 8.058 | 8.028 | 8.124 | BB | 257597 | 2804182 | 87.94% | 4.871% |
| 7 | 9.654 | 9.618 | 9.738 | BB | 252849 | 2826196 | 88.63% | 4.909% |
| 8 | 11.092 | 11.051 | 11.164 | BB | 242049 | 2816962 | 88.34% | 4.893% |
| 9 | 11.396 | 11.351 | 11.468 | BB | 291476 | 3120216 | 97.86% | 5.420% |
| 10 | 12.398 | 12.361 | 12.471 | BB | 221408 | 2680291 | 84.06% | 4.656% |
| 11 | 12.838 | 12.801 | 12.911 | BB | 192148 | 2266768 | 71.09% | 3.937% |
| 12 | 13.007 | 12.964 | 13.074 | BB | 211956 | 2626108 | 82.36% | 4.562% |
| 13 | 13.593 | 13.558 | 13.664 | BB | 210666 | 2593669 | 81.34% | 4.505% |
| 14 | 14.694 | 14.651 | 14.768 | BB | 204322 | 2570552 | 80.62% | 4.465% |
| 15 | 15.712 | 15.644 | 15.784 | BB | 193358 | 2540397 | 79.67% | 4.413% |
| 16 | 16.661 | 16.598 | 16.728 | BB | 189931 | 2539276 | 79.64% | 4.411% |
| 17 | 17.547 | 17.494 | 17.614 | BB | 189694 | 2663953 | 83.55% | 4.627% |
| 18 | 18.379 | 18.328 | 18.438 | BB | 177380 | 2619367 | 82.15% | 4.550% |
| 19 | 19.161 | 19.121 | 19.234 | BB | 164155 | 2321702 | 72.81% | 4.033% |
| 20 | 19.900 | 19.851 | 19.969 | BBA | 139223 | 2007468 | 62.96% | 3.487% |
| 21 | 20.612 | 20.551 | 20.668 | BB | 113739 | 1863761 | 58.45% | 3.237% |
| 22 | 21.465 | 21.391 | 21.551 | BB | 78566 | 1728277 | 54.20% | 3.002% |
| | | | Sum of corrected areas: | | | 57570045 | | |

Aliphatic EPH 021125.M Sat Mar 01 01:22:27 2025

Evaluate Continuing Calibration Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022825AL\
Data File : FC068321.D
Signal(s) : FID1A.ch
Acq On : 28 Feb 2025 10:23
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
FID_C
**LabSampleId :**
20 PPM ALIPHATIC HC STD

Integration File: autoint1.e
Quant Time: Mar 05 05:22:47 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 1 | T | n-Nonane (C9) | 140.677 | 146.060 E3 | -3.8 | 103 | 0.00 |
| 2 | T | n-Decane (C10) | 141.671 | 147.898 E3 | -4.4 | 104 | 0.00 |
| 3 | T | A~Naphthalene (C11.7) | 153.034 | 159.430 E3 | -4.2 | 103 | 0.00 |
| 4 | T | n-Dodecane (C12) | 140.758 | 145.820 E3 | -3.6 | 103 | 0.00 |
| 5 | T | A~2-methylnaphthalene (C12. | 144.828 | 149.837 E3 | -3.5 | 102 | 0.00 |
| 6 | T | n-Tetradecane (C14) | 136.344 | 140.209 E3 | -2.8 | 103 | 0.00 |
| 7 | T | n-Hexadecane (C16) | 136.965 | 141.310 E3 | -3.2 | 103 | 0.00 |
| 8 | T | n-Octadecane (C18) | 136.758 | 140.848 E3 | -3.0 | 103 | 0.00 |
| 9 | S | ortho-Terphenyl (SURR) | 153.444 | 156.011 E3 | -1.7 | 102 | 0.00 |
| 10 | T | n-Eicosane (C20) | 130.287 | 134.015 E3 | -2.9 | 103 | 0.00 |
| 11 | T | n-Heneicosane (C21) | 127.847 | 131.305 E3 | -2.7 | 103 | 0.00 |
| 12 | S | 1-chlorooctadecane (SURR) | 112.474 | 113.338 E3 | -0.8 | 100 | 0.00 |
| 13 | T | n-Docosane (C22) | 126.028 | 129.683 E3 | -2.9 | 103 | 0.00 |
| 14 | T | n-Tetracosane (C24) | 124.377 | 128.528 E3 | -3.3 | 103 | 0.00 |
| 15 | T | n-Hexacosane (C26) | 121.593 | 127.020 E3 | -4.5 | 104 | 0.00 |
| 16 | T | n-Octacosane (C28) | 118.767 | 125.858 E3 | -6.0 | 106 | 0.00 |
| 17 | T | n-Tricontane (C30) | 120.366 | 131.588 E3 | -9.3 | 110 | 0.00 |
| 18 | T | n-Dotriacontane (C32) | 116.067 | 129.603 E3 | -11.7 | 112 | 0.00 |
| 19 | T | n-Tetratriacontane (C34) | 108.059 | 116.085 E3 | -7.4 | 108 | 0.00 |
| 20 | T | n-Hexatriacontane (C36) | 96.169 | 100.373 E3 | -4.4 | 104 | 0.00 |
| 21 | T | n-Octatriacontane (C38) | 89.898 | 93.188 E3 | -3.7 | 103 | 0.00 |
| 22 | T | n-Tetracontane (C40) | 86.520 | 86.414 E3 | 0.1 | 100 | 0.00 |

Evaluate Continuing Calibration Report - Not Founds

---

(#) = Out of Range SPCC's out = 0 CCC's out = 0

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

# Continuing Calibration Report for SequenceID : FC022825AL

| Parameter | AreaCount | Conc. | RT_Min | RT_Max | Response Factor | AVGRF | %DEV |
|---|---|---|---|---|---|---|---|
| **File ID :** | **FC068331.D** | | | | | | |
| Aliphatic C9-C12 | 8595776.000 | 60.000 | 3.104 | 6.369 | 143262.933 | 141035.502 | -1.579 |
| Aliphatic C12-C16 | 5515542.000 | 40.000 | 6.370 | 9.754 | 137888.550 | 136654.515 | -0.903 |
| Aliphatic C16-C21 | 7931958.000 | 60.000 | 9.755 | 13.107 | 132199.300 | 131630.895 | -0.432 |
| Aliphatic C21-C28 | 9935233.000 | 80.000 | 13.108 | 16.761 | 124190.413 | 122691.322 | -1.222 |
| Aliphatic C28-C40 | 12971411.000 | 120.000 | 16.762 | 21.565 | 108095.092 | 102846.462 | -5.103 |
| Aliphatic EPH | 44949920.000 | 360.000 | 3.104 | 21.565 | 124860.889 | 122175.127 | -2.198 |

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

| | | | |
|---|---|---|---|
| Lab Sample ID: | 20 PPM ALIPHATIC HC S | Acq On: | 28 Feb 2025 16:30 |
| Client Sample ID: | | Operator: | YP/AJ |
| Data file: | FC068331.D | Misc: | |
| Instrument: | FID_C | ALS Vial: | 2 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | Units |
|---|---|---|---|---|---|
| Aliphatic C9-C12 | 3.104 | 6.369 | 8595776.000 | 60.000 | ug/ml |
| Aliphatic C12-C16 | 6.370 | 9.754 | 5515542.000 | 40.000 | ug/ml |
| Aliphatic C16-C21 | 9.755 | 13.107 | 7931958.000 | 60.000 | ug/ml |
| Aliphatic C21-C28 | 13.108 | 16.761 | 9935233.000 | 80.000 | ug/ml |
| Aliphatic C28-C40 | 16.762 | 21.565 | 12971411.000 | 120.000 | ug/ml |
| Aliphatic EPH | 3.104 | 21.565 | 44949920.000 | 360.000 | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022825AL\
Data File : FC068331.D
Signal(s) : FID1A.ch
Acq On : 28 Feb 2025 16:30
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD

Integration File: autoint1.e
Quant Time: Mar 05 05:24:26 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

| | Compound | R.T. | Response | Conc Units |
|---|---|---|---|---|
| | **System Monitoring Compounds** | | | |
| 9) | S ortho-Terphenyl (SURR) | 11.396 | 3041324 | 19.820 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 39.64% |
| 12) | S 1-chlorooctadecane (S... | 12.838 | 2216283 | 19.705 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 39.41% |
| | **Target Compounds** | | | |
| 1) | T n-Nonane (C9) | 3.204 | 2855933 | 20.301 ug/ml |
| 2) | T n-Decane (C10) | 4.261 | 2888976 | 20.392 ug/ml |
| 3) | T A~Naphthalene (C11.7) | 5.827 | 3101671 | 20.268 ug/ml |
| 4) | T n-Dodecane (C12) | 6.269 | 2850867 | 20.254 ug/ml |
| 5) | T A~2-methylnaphthalene... | 6.879 | 2932380 | 20.247 ug/ml |
| 6) | T n-Tetradecane (C14) | 8.057 | 2744536 | 20.130 ug/ml |
| 7) | T n-Hexadecane (C16) | 9.653 | 2771006 | 20.231 ug/ml |
| 8) | T n-Octadecane (C18) | 11.091 | 2755090 | 20.146 ug/ml |
| 10) | T n-Eicosane (C20) | 12.397 | 2614343 | 20.066 ug/ml |
| 11) | T n-Heneicosane (C21) | 13.008 | 2562525 | 20.044 ug/ml |
| 13) | T n-Docosane (C22) | 13.592 | 2525576 | 20.040 ug/ml |
| 14) | T n-Tetracosane (C24) | 14.693 | 2501354 | 20.111 ug/ml |
| 15) | T n-Hexacosane (C26) | 15.713 | 2460872 | 20.239 ug/ml |
| 16) | T n-Octacosane (C28) | 16.661 | 2447431 | 20.607 ug/ml |
| 17) | T n-Tricontane (C30) | 17.548 | 2580185 | 21.436 ug/ml |
| 18) | T n-Dotriacontane (C32) | 18.378 | 2550561 | 21.975 ug/ml |
| 19) | T n-Tetratriacontane (C34) | 19.161 | 2278466 | 21.085 ug/ml |
| 20) | T n-Hexatriacontane (C36) | 19.900 | 1969700 | 20.482 ug/ml |
| 21) | T n-Octatriacontane (C38) | 20.612 | 1843490 | 20.507 ug/ml |
| 22) | T n-Tetracontane (C40) | 21.464 | 1749009 | 20.215 ug/ml |

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

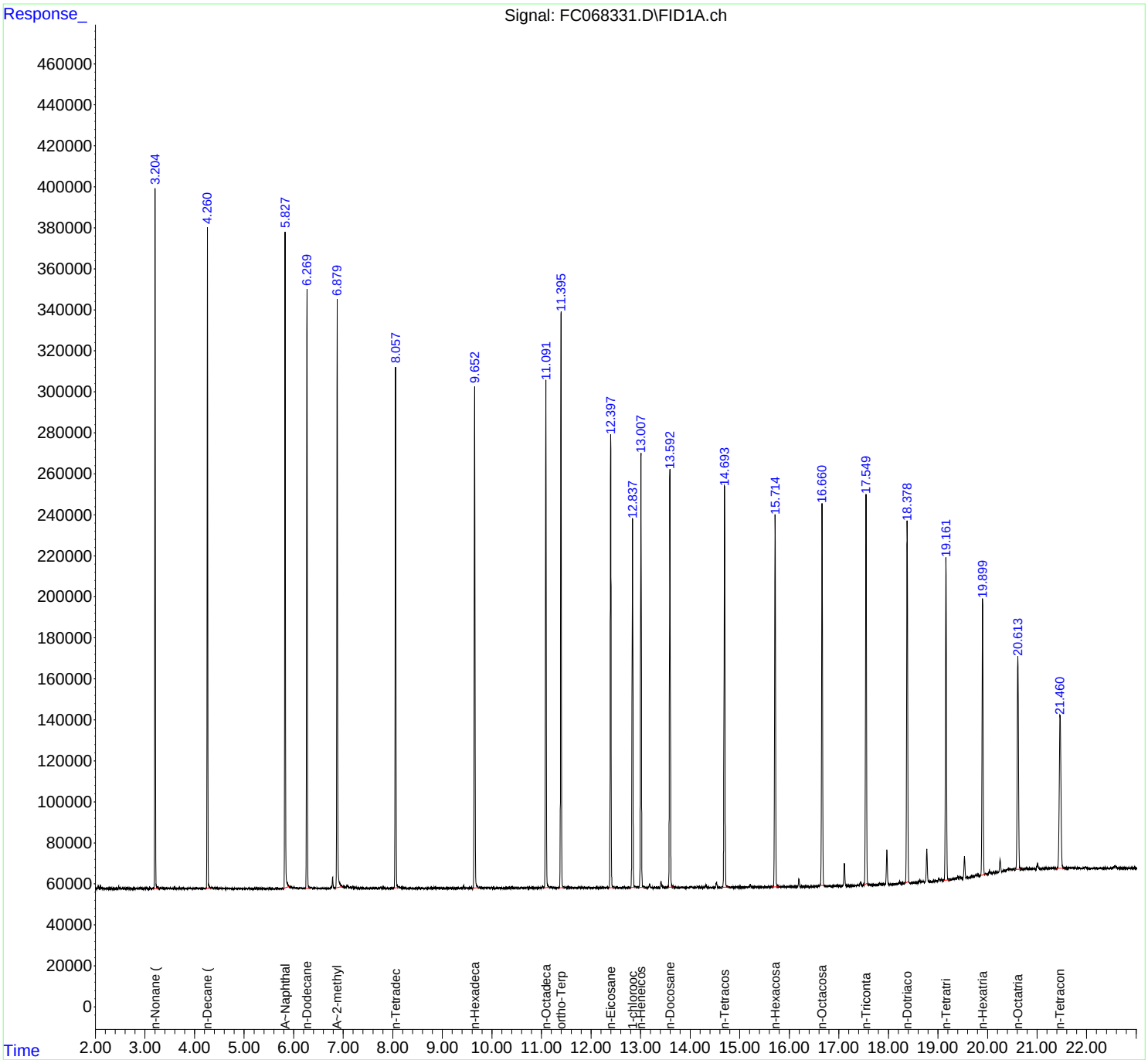
Quantitation Report (QT Reviewed)

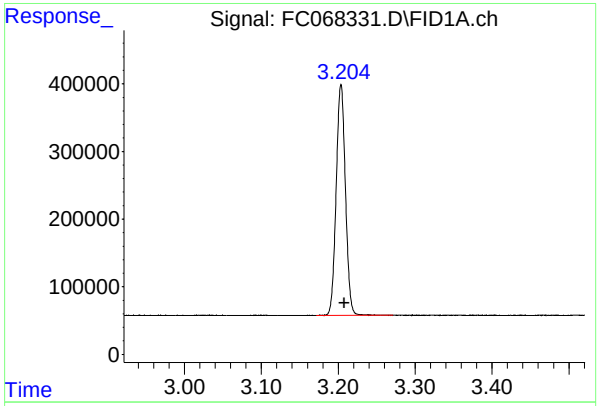
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022825AL\
Data File : FC068331.D
Signal(s) : FID1A.ch
Acq On : 28 Feb 2025 16:30
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD

Integration File: autoint1.e
Quant Time: Mar 05 05:24:26 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

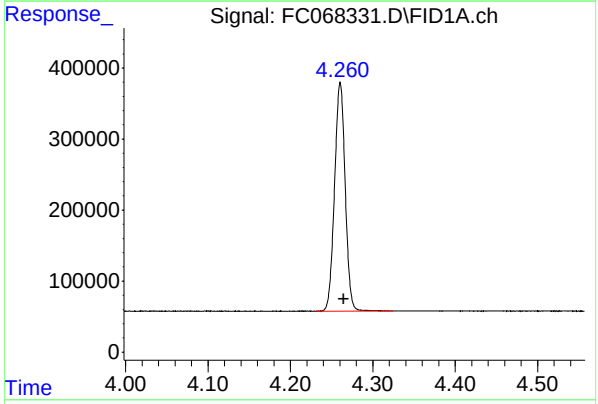





#1 n-Nonane (C9)

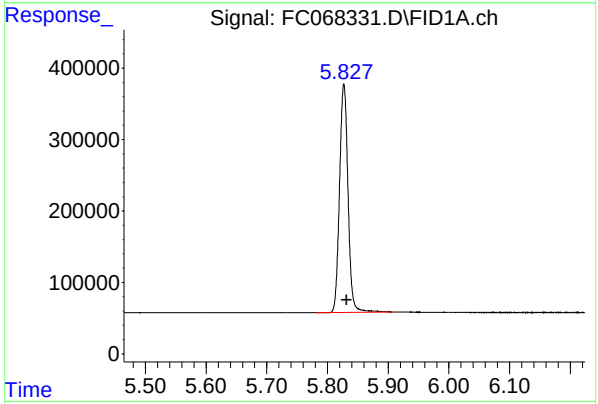
R.T.: 3.204 min
Delta R.T.: -0.004 min
Response: 2855933
Conc: 20.30 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD



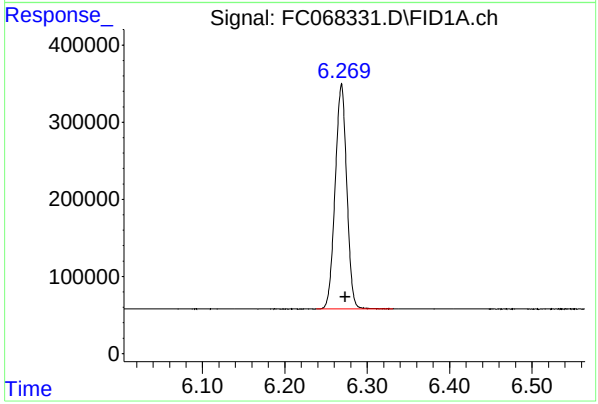

#2 n-Decane (C10)

R.T.: 4.261 min
Delta R.T.: -0.004 min
Response: 2888976
Conc: 20.39 ug/ml



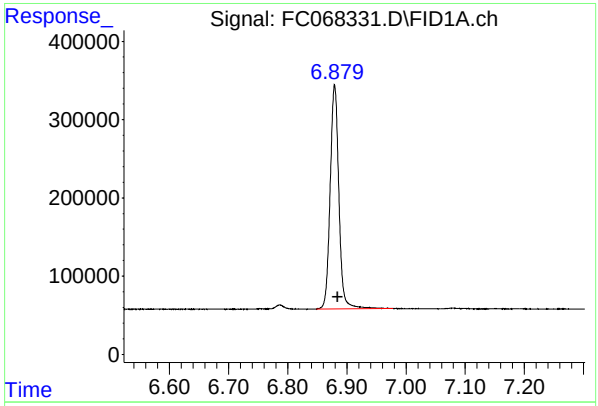

#3 A~Naphthalene (C11.7)

R.T.: 5.827 min
Delta R.T.: -0.004 min
Response: 3101671
Conc: 20.27 ug/ml




#4 n-Dodecane (C12)

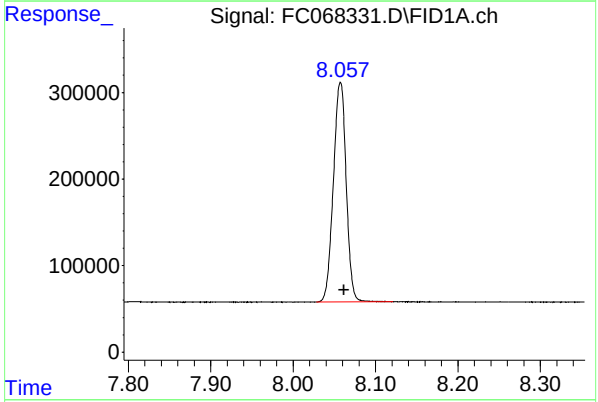
R.T.: 6.269 min
Delta R.T.: -0.005 min
Response: 2850867
Conc: 20.25 ug/ml




#5 A~2-methylnaphthalene (C12.89)

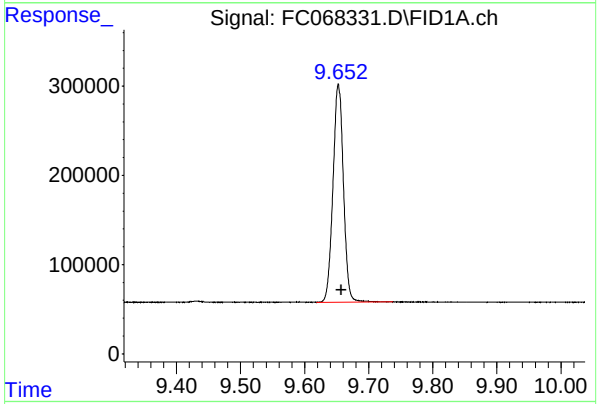
R.T.: 6.879 min
Delta R.T.: -0.005 min
Response: 2932380
Conc: 20.25 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD



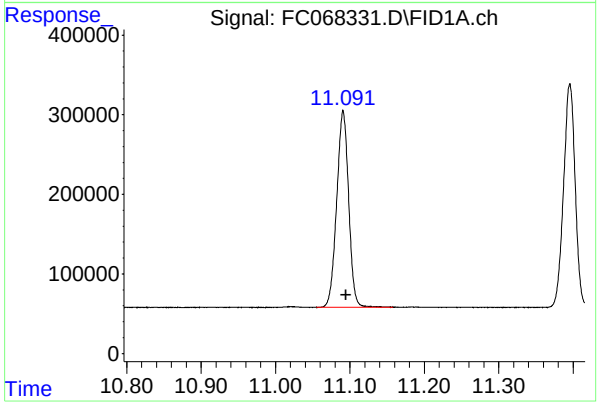

#6 n-Tetradecane (C14)

R.T.: 8.057 min
Delta R.T.: -0.004 min
Response: 2744536
Conc: 20.13 ug/ml



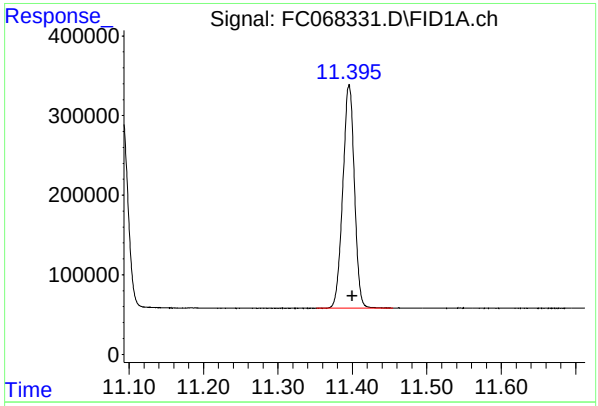

#7 n-Hexadecane (C16)

R.T.: 9.653 min
Delta R.T.: -0.004 min
Response: 2771006
Conc: 20.23 ug/ml




#8 n-Octadecane (C18)

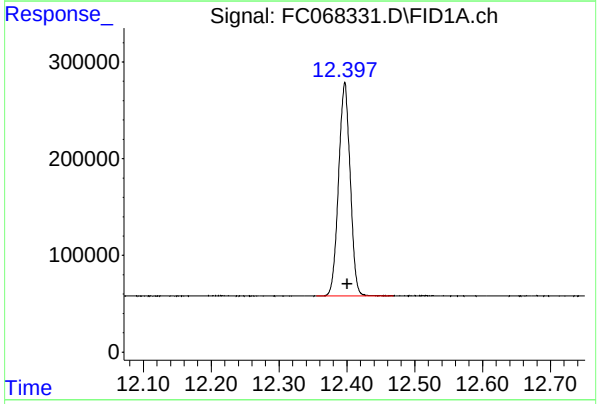
R.T.: 11.091 min
Delta R.T.: -0.004 min
Response: 2755090
Conc: 20.15 ug/ml




#9 ortho-Terphenyl (SURR)

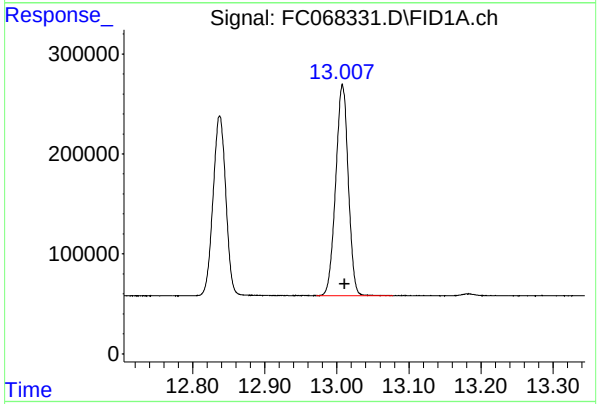
R.T.: 11.396 min
Delta R.T.: -0.004 min
Response: 3041324
Conc: 19.82 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD



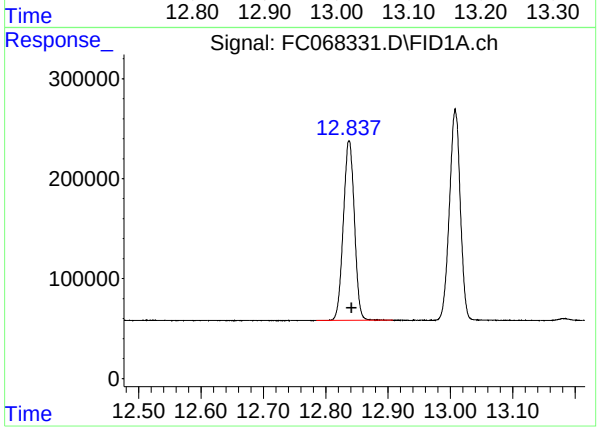

#10 n-Eicosane (C20)

R.T.: 12.397 min
Delta R.T.: -0.004 min
Response: 2614343
Conc: 20.07 ug/ml



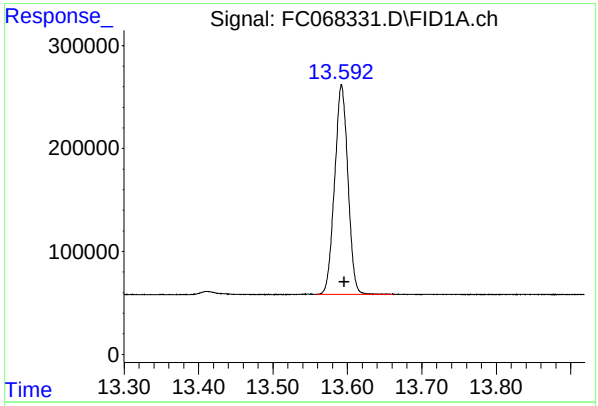

#11 n-Heneicosane (C21)

R.T.: 13.008 min
Delta R.T.: -0.003 min
Response: 2562525
Conc: 20.04 ug/ml




#12 1-chlorooctadecane (SURR)

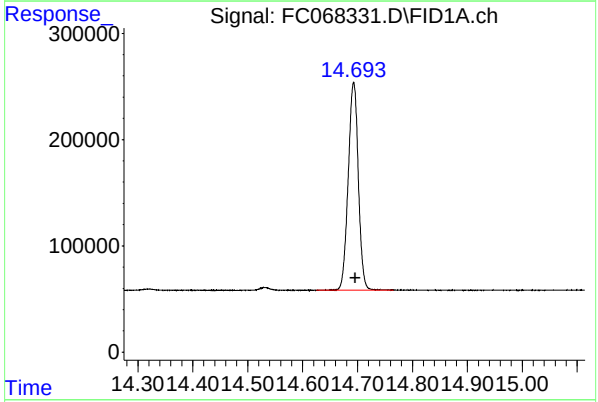
R.T.: 12.838 min
Delta R.T.: -0.004 min
Response: 2216283
Conc: 19.70 ug/ml




#13 n-Docosane (C22)

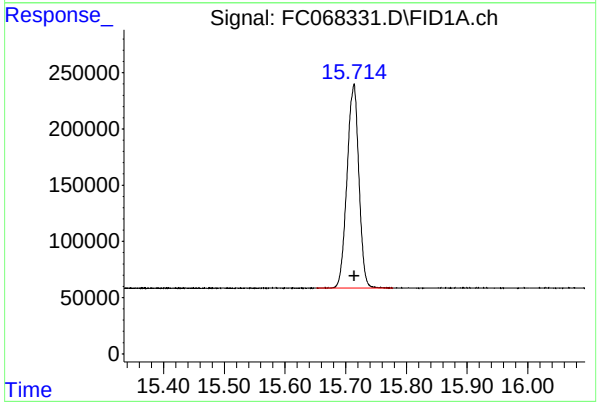
R.T.: 13.592 min
Delta R.T.: -0.004 min
Response: 2525576
Conc: 20.04 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD



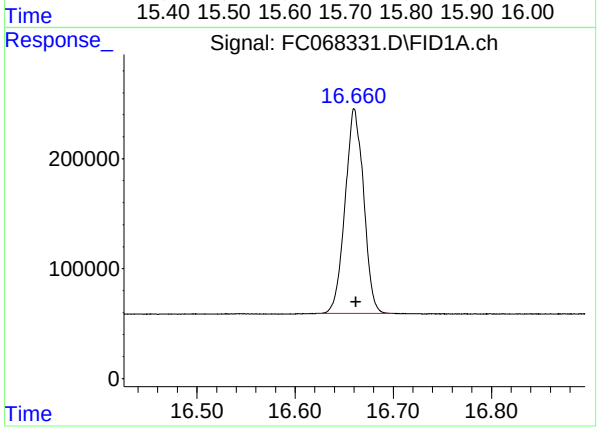

#14 n-Tetracosane (C24)

R.T.: 14.693 min
Delta R.T.: -0.003 min
Response: 2501354
Conc: 20.11 ug/ml



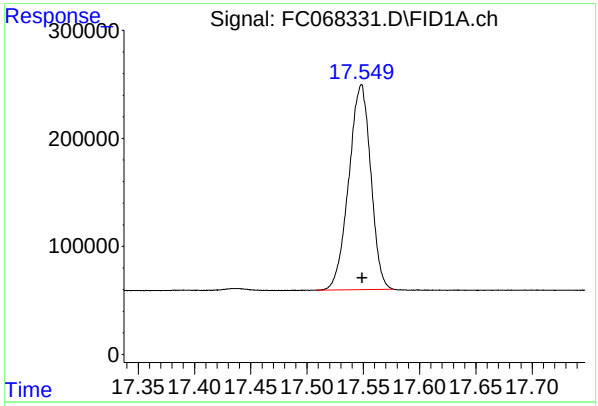

#15 n-Hexacosane (C26)

R.T.: 15.713 min
Delta R.T.: 0.000 min
Response: 2460872
Conc: 20.24 ug/ml




#16 n-Octacosane (C28)

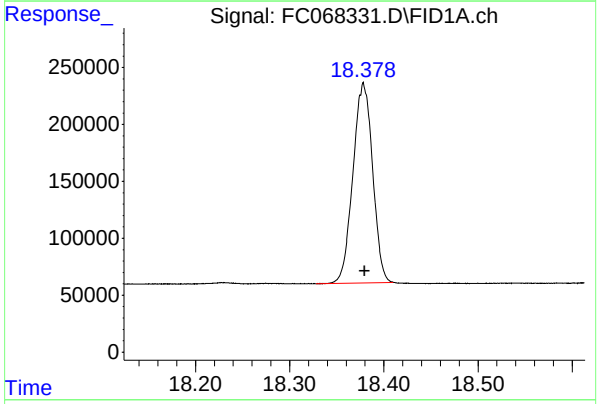
R.T.: 16.661 min
Delta R.T.: -0.001 min
Response: 2447431
Conc: 20.61 ug/ml




#17 n-Tricontane (C30)

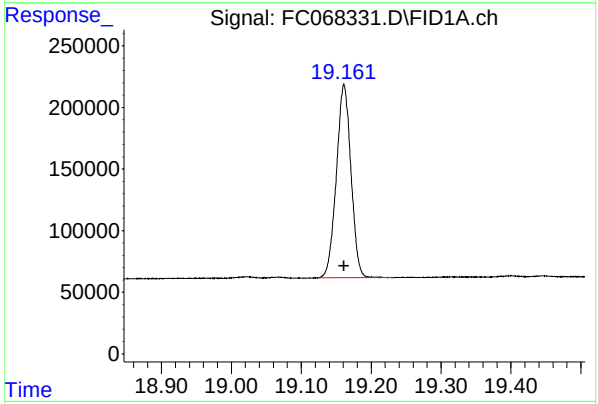
R.T.: 17.548 min
Delta R.T.: -0.001 min
Response: 2580185
Conc: 21.44 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD



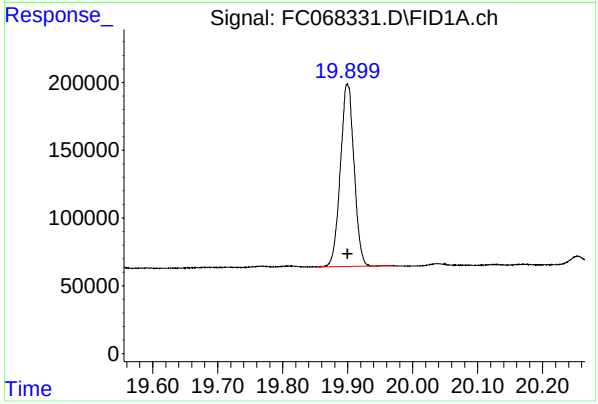

#18 n-Dotriacontane (C32)

R.T.: 18.378 min
Delta R.T.: -0.001 min
Response: 2550561
Conc: 21.97 ug/ml



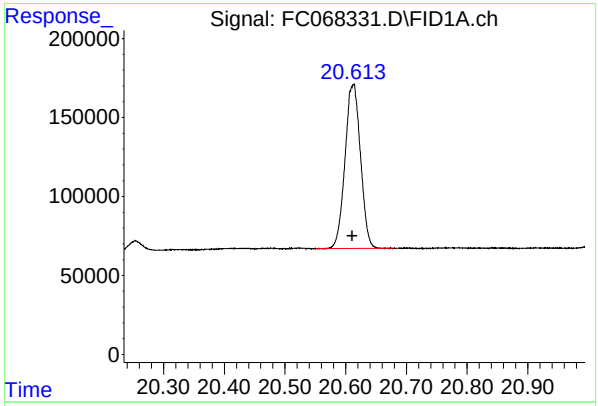

#19 n-Tetratriacontane (C34)

R.T.: 19.161 min
Delta R.T.: 0.000 min
Response: 2278466
Conc: 21.09 ug/ml




#20 n-Hexatriacontane (C36)

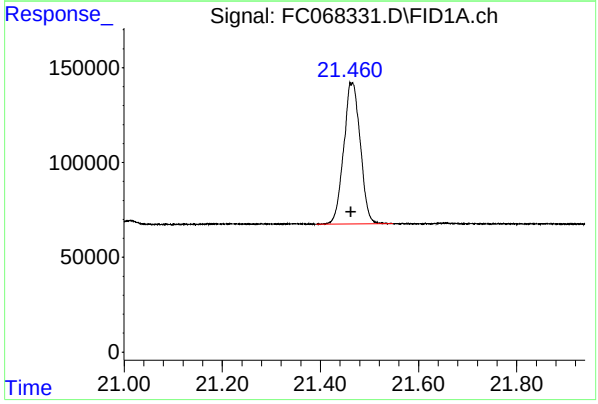
R.T.: 19.900 min
Delta R.T.: 0.000 min
Response: 1969700
Conc: 20.48 ug/ml




#21 n-Octatriacontane (C38)

R.T.: 20.612 min
Delta R.T.: 0.000 min
Response: 1843490
Conc: 20.51 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD




#22 n-Tetracontane (C40)

R.T.: 21.464 min
Delta R.T.: 0.002 min
Response: 1749009
Conc: 20.21 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022825AL\
Data File : FC068331.D
Signal(s) : FID1A.ch
Acq On : 28 Feb 2025 16:30
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Title : GC Extractables

Signal : FID1A.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 3.204 | 3.171 | 3.271 | BB | 340781 | 2855933 | 92.08% | 5.069% |
| 2 | 4.261 | 4.231 | 4.325 | BB | 321681 | 2888976 | 93.14% | 5.127% |
| 3 | 5.827 | 5.781 | 5.908 | BB | 319702 | 3101671 | 100.00% | 5.505% |
| 4 | 6.269 | 6.238 | 6.331 | BB | 288188 | 2850867 | 91.91% | 5.060% |
| 5 | 6.879 | 6.848 | 6.978 | BB | 284524 | 2932380 | 94.54% | 5.204% |
| 6 | 8.057 | 8.028 | 8.121 | BB | 254939 | 2744536 | 88.49% | 4.871% |
| 7 | 9.653 | 9.618 | 9.738 | BB | 242755 | 2771006 | 89.34% | 4.918% |
| 8 | 11.091 | 11.055 | 11.158 | BB | 246136 | 2755090 | 88.83% | 4.890% |
| 9 | 11.396 | 11.351 | 11.455 | BB | 281274 | 3041324 | 98.05% | 5.398% |
| 10 | 12.397 | 12.355 | 12.468 | BB | 221154 | 2614343 | 84.29% | 4.640% |
| 11 | 12.838 | 12.785 | 12.908 | BB | 180054 | 2216283 | 71.45% | 3.934% |
| 12 | 13.008 | 12.971 | 13.078 | BB | 210871 | 2562525 | 82.62% | 4.548% |
| 13 | 13.592 | 13.558 | 13.661 | BB | 202870 | 2525576 | 81.43% | 4.482% |
| 14 | 14.693 | 14.625 | 14.765 | BB | 195873 | 2501354 | 80.65% | 4.439% |
| 15 | 15.713 | 15.651 | 15.778 | BB | 183325 | 2460872 | 79.34% | 4.368% |
| 16 | 16.661 | 16.598 | 16.731 | BB | 184728 | 2472708 | 79.72% | 4.389% |
| 17 | 17.548 | 17.478 | 17.615 | BB | 190067 | 2607807 | 84.08% | 4.628% |
| 18 | 18.378 | 18.198 | 18.445 | BB | 175351 | 2599704 | 83.82% | 4.614% |
| 19 | 19.161 | 19.121 | 19.231 | BB | 156515 | 2278466 | 73.46% | 4.044% |
| 20 | 19.900 | 19.851 | 19.970 | BBA | 134773 | 1969700 | 63.50% | 3.496% |
| 21 | 20.612 | 20.551 | 20.678 | BB | 103519 | 1843490 | 59.44% | 3.272% |
| 22 | 21.464 | 21.391 | 21.548 | BB | 74225 | 1749009 | 56.39% | 3.104% |
| | | | Sum of corrected areas: | | | 56343617 | | |

Aliphatic EPH 021125.M Sat Mar 01 01:24:21 2025

Evaluate Continuing Calibration Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022825AL\
Data File : FC068331.D
Signal(s) : FID1A.ch
Acq On : 28 Feb 2025 16:30
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
FID_C
**LabSampleId :**
20 PPM ALIPHATIC HC STD

Integration File: autoint1.e
Quant Time: Mar 05 05:24:26 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 1 | T | n-Nonane (C9) | 140.677 | 142.797 | E3 | -1.5 | 101 | 0.00 |
| 2 | T | n-Decane (C10) | 141.671 | 144.449 | E3 | -2.0 | 101 | 0.00 |
| 3 | T | A~Naphthalene (C11.7) | 153.034 | 155.084 | E3 | -1.3 | 100 | 0.00 |
| 4 | T | n-Dodecane (C12) | 140.758 | 142.543 | E3 | -1.3 | 101 | 0.00 |
| 5 | T | A~2-methylnaphthalene (C12. | 144.828 | 146.619 | E3 | -1.2 | 100 | 0.00 |
| 6 | T | n-Tetradecane (C14) | 136.344 | 137.227 | E3 | -0.6 | 101 | 0.00 |
| 7 | T | n-Hexadecane (C16) | 136.965 | 138.550 | E3 | -1.2 | 101 | 0.00 |
| 8 | T | n-Octadecane (C18) | 136.758 | 137.754 | E3 | -0.7 | 101 | 0.00 |
| 9 | S | ortho-Terphenyl (SURR) | 153.444 | 152.066 | E3 | 0.9 | 99 | 0.00 |
| 10 | T | n-Eicosane (C20) | 130.287 | 130.717 | E3 | -0.3 | 100 | 0.00 |
| 11 | T | n-Heneicosane (C21) | 127.847 | 128.126 | E3 | -0.2 | 100 | 0.00 |
| 12 | S | 1-chlorooctadecane (SURR) | 112.474 | 110.814 | E3 | 1.5 | 98 | 0.00 |
| 13 | T | n-Docosane (C22) | 126.028 | 126.279 | E3 | -0.2 | 100 | 0.00 |
| 14 | T | n-Tetracosane (C24) | 124.377 | 125.068 | E3 | -0.6 | 100 | 0.00 |
| 15 | T | n-Hexacosane (C26) | 121.593 | 123.044 | E3 | -1.2 | 101 | 0.00 |
| 16 | T | n-Octacosane (C28) | 118.767 | 122.372 | E3 | -3.0 | 103 | 0.00 |
| 17 | T | n-Tricontane (C30) | 120.366 | 129.009 | E3 | -7.2 | 108 | 0.00 |
| 18 | T | n-Dotriacontane (C32) | 116.067 | 127.528 | E3 | -9.9 | 110 | 0.00 |
| 19 | T | n-Tetratriacontane (C34) | 108.059 | 113.923 | E3 | -5.4 | 106 | 0.00 |
| 20 | T | n-Hexatriacontane (C36) | 96.169 | 98.485 | E3 | -2.4 | 103 | 0.00 |
| 21 | T | n-Octatriacontane (C38) | 89.898 | 92.174 | E3 | -2.5 | 102 | 0.00 |
| 22 | T | n-Tetracontane (C40) | 86.520 | 87.450 | E3 | -1.1 | 101 | 0.00 |

Evaluate Continuing Calibration Report - Not Founds

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(#) = Out of Range SPCC's out = 0 CCC's out = 0

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

# Continuing Calibration Report for SequenceID : FC022825AL

| Parameter | AreaCount | Conc. | RT_Min | RT_Max | Response Factor | AVGRF | %DEV |
|---|---|---|---|---|---|---|---|
| **File ID :** | **FC068341.D** | | | | | | |
| Aliphatic C9-C12 | 8509686.000 | 60.000 | 3.104 | 6.369 | 141828.100 | 141035.502 | -0.562 |
| Aliphatic C12-C16 | 5481187.000 | 40.000 | 6.370 | 9.754 | 137029.675 | 136654.515 | -0.275 |
| Aliphatic C16-C21 | 7916038.000 | 60.000 | 9.755 | 13.107 | 131933.967 | 131630.895 | -0.230 |
| Aliphatic C21-C28 | 9904656.000 | 80.000 | 13.108 | 16.761 | 123808.200 | 122691.322 | -0.910 |
| Aliphatic C28-C40 | 13174250.000 | 120.000 | 16.762 | 21.565 | 109785.417 | 102846.462 | -6.747 |
| Aliphatic EPH | 44985817.000 | 360.000 | 3.104 | 21.565 | 124960.603 | 122175.127 | -2.280 |

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

| | | | |
|---|---|---|---|
| Lab Sample ID: | 20 PPM ALIPHATIC HC S | Acq On: | 28 Feb 2025 23:50 |
| Client Sample ID: | | Operator: | YP/AJ |
| Data file: | FC068341.D | Misc: | |
| Instrument: | FID_C | ALS Vial: | 2 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | Units |
|---|---|---|---|---|---|
| Aliphatic C9-C12 | 3.104 | 6.369 | 8509686.000 | 60.000 | ug/ml |
| Aliphatic C12-C16 | 6.370 | 9.754 | 5481187.000 | 40.000 | ug/ml |
| Aliphatic C16-C21 | 9.755 | 13.107 | 7916038.000 | 60.000 | ug/ml |
| Aliphatic C21-C28 | 13.108 | 16.761 | 9904656.000 | 80.000 | ug/ml |
| Aliphatic C28-C40 | 16.762 | 21.565 | 13174250.000 | 120.000 | ug/ml |
| Aliphatic EPH | 3.104 | 21.565 | 44985817.000 | 360.000 | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022825AL\
Data File : FC068341.D
Signal(s) : FID1A.ch
Acq On : 28 Feb 2025 23:50
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD

Integration File: autoint1.e
Quant Time: Mar 05 05:26:03 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

| | Compound | R.T. | Response | Conc Units |
|---|---|---|---|---|
| | **System Monitoring Compounds** | | | |
| 9) | S ortho-Terphenyl (SURR) | 11.395 | 3019061 | 19.675 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 39.35% |
| 12) | S 1-chlorooctadecane (S... | 12.838 | 2213113 | 19.677 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 39.35% |
| | **Target Compounds** | | | |
| 1) | T n-Nonane (C9) | 3.204 | 2821805 | 20.059 ug/ml |
| 2) | T n-Decane (C10) | 4.261 | 2860924 | 20.194 ug/ml |
| 3) | T A~Naphthalene (C11.7) | 5.827 | 3080505 | 20.130 ug/ml |
| 4) | T n-Dodecane (C12) | 6.268 | 2826957 | 20.084 ug/ml |
| 5) | T A~2-methylnaphthalene... | 6.879 | 2905424 | 20.061 ug/ml |
| 6) | T n-Tetradecane (C14) | 8.057 | 2729025 | 20.016 ug/ml |
| 7) | T n-Hexadecane (C16) | 9.652 | 2752162 | 20.094 ug/ml |
| 8) | T n-Octadecane (C18) | 11.091 | 2750082 | 20.109 ug/ml |
| 10) | T n-Eicosane (C20) | 12.397 | 2613618 | 20.061 ug/ml |
| 11) | T n-Heneicosane (C21) | 13.008 | 2552338 | 19.964 ug/ml |
| 13) | T n-Docosane (C22) | 13.592 | 2514482 | 19.952 ug/ml |
| 14) | T n-Tetracosane (C24) | 14.694 | 2489195 | 20.013 ug/ml |
| 15) | T n-Hexacosane (C26) | 15.712 | 2451970 | 20.165 ug/ml |
| 16) | T n-Octacosane (C28) | 16.661 | 2449009 | 20.620 ug/ml |
| 17) | T n-Tricontane (C30) | 17.548 | 2590876 | 21.525 ug/ml |
| 18) | T n-Dotriacontane (C32) | 18.379 | 2561161 | 22.066 ug/ml |
| 19) | T n-Tetratriacontane (C34) | 19.162 | 2275964 | 21.062 ug/ml |
| 20) | T n-Hexatriacontane (C36) | 19.901 | 1942697 | 20.201 ug/ml |
| 21) | T n-Octatriacontane (C38) | 20.612 | 1869920 | 20.801 ug/ml |
| 22) | T n-Tetracontane (C40) | 21.464 | 1933632 | 22.349 ug/ml |

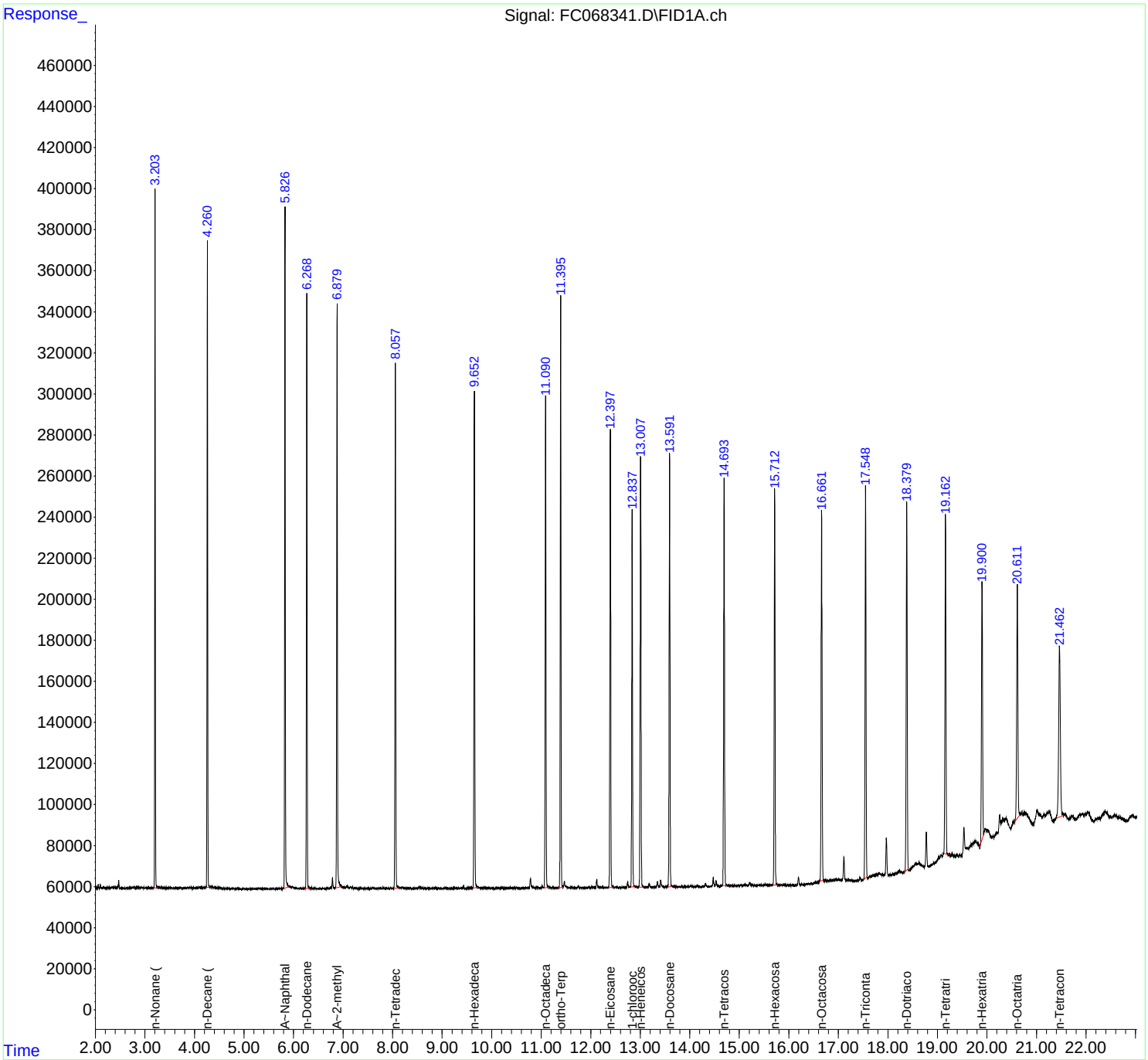
(f)=RT Delta > 1/2 Window (m)=manual int.

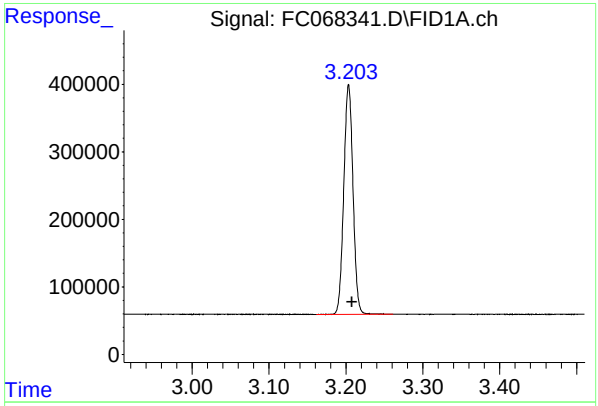
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022825AL\
Data File : FC068341.D
Signal(s) : FID1A.ch
Acq On : 28 Feb 2025 23:50
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD

Integration File: autoint1.e
Quant Time: Mar 05 05:26:03 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

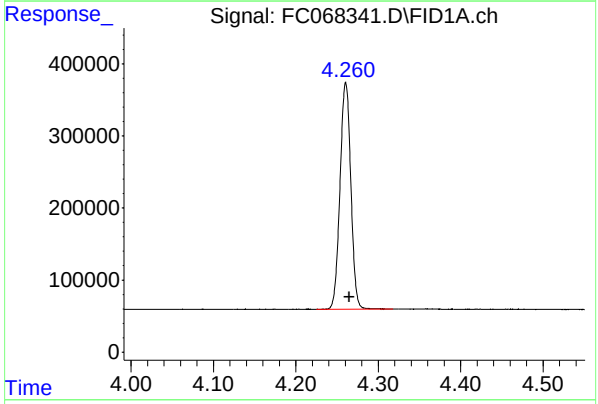





#1 n-Nonane (C9)

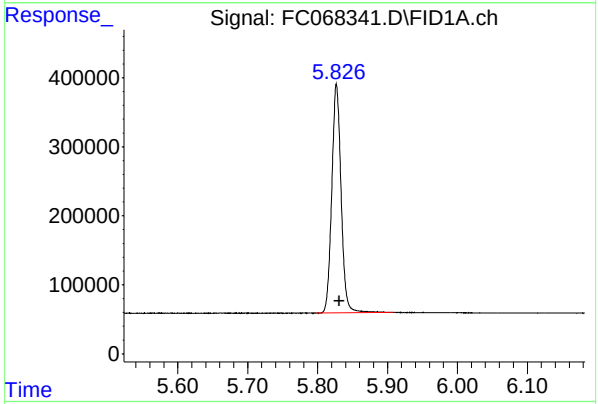
R.T.: 3.204 min
Delta R.T.: -0.004 min
Response: 2821805
Conc: 20.06 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD



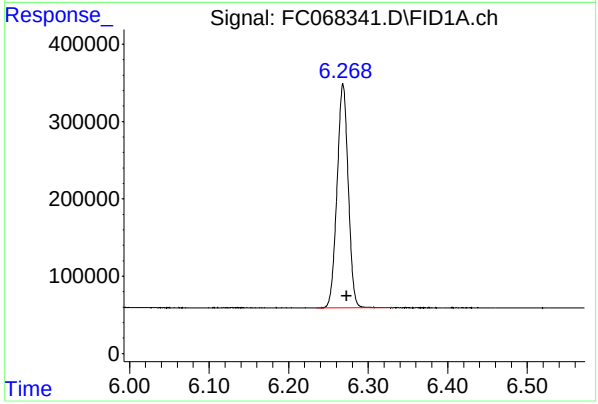

#2 n-Decane (C10)

R.T.: 4.261 min
Delta R.T.: -0.004 min
Response: 2860924
Conc: 20.19 ug/ml



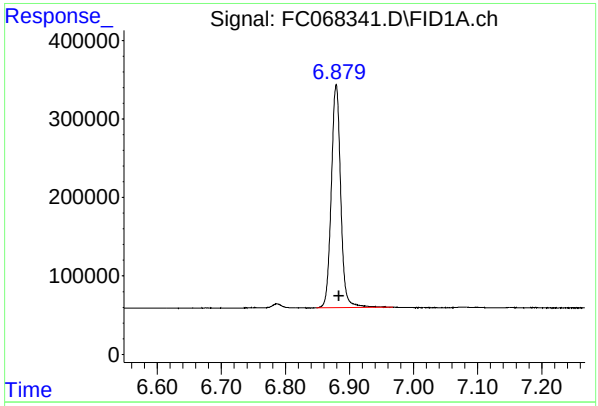

#3 A~Naphthalene (C11.7)

R.T.: 5.827 min
Delta R.T.: -0.004 min
Response: 3080505
Conc: 20.13 ug/ml




#4 n-Dodecane (C12)

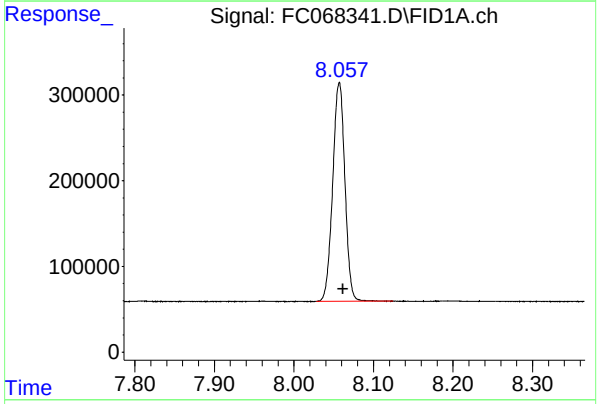
R.T.: 6.268 min
Delta R.T.: -0.005 min
Response: 2826957
Conc: 20.08 ug/ml




#5 A~2-methylnaphthalene (C12.89)

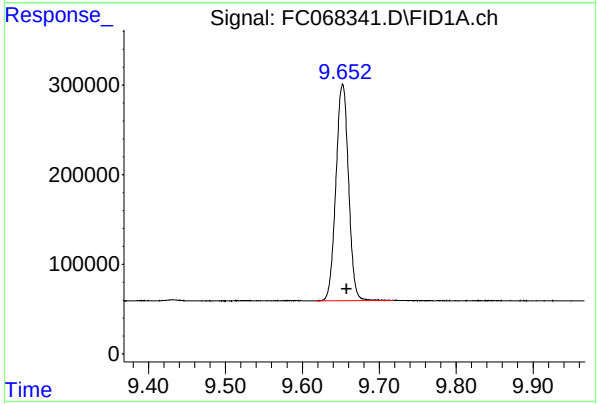
R.T.: 6.879 min
Delta R.T.: -0.005 min
Response: 2905424
Conc: 20.06 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD



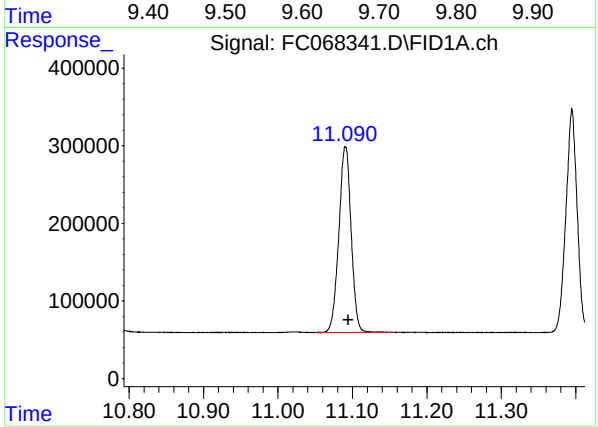

#6 n-Tetradecane (C14)

R.T.: 8.057 min
Delta R.T.: -0.005 min
Response: 2729025
Conc: 20.02 ug/ml



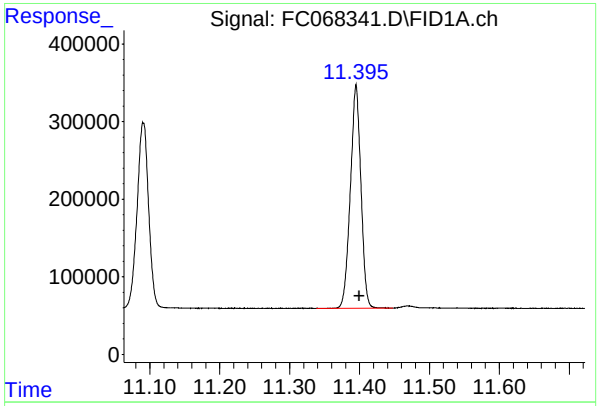

#7 n-Hexadecane (C16)

R.T.: 9.652 min
Delta R.T.: -0.005 min
Response: 2752162
Conc: 20.09 ug/ml




#8 n-Octadecane (C18)

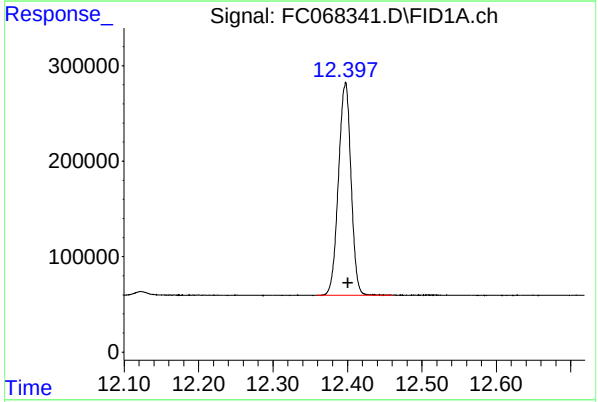
R.T.: 11.091 min
Delta R.T.: -0.004 min
Response: 2750082
Conc: 20.11 ug/ml




#9 ortho-Terphenyl (SURR)

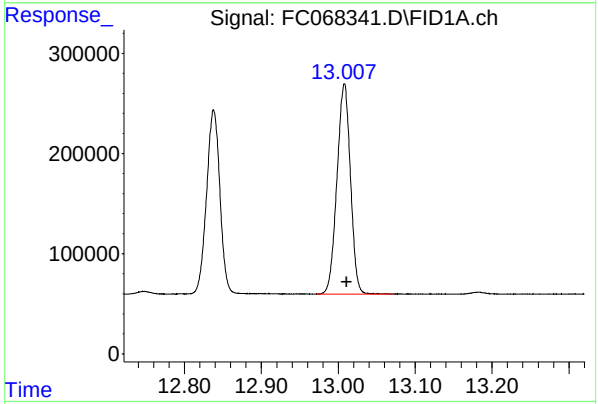
R.T.: 11.395 min
Delta R.T.: -0.005 min
Response: 3019061
Conc: 19.68 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD



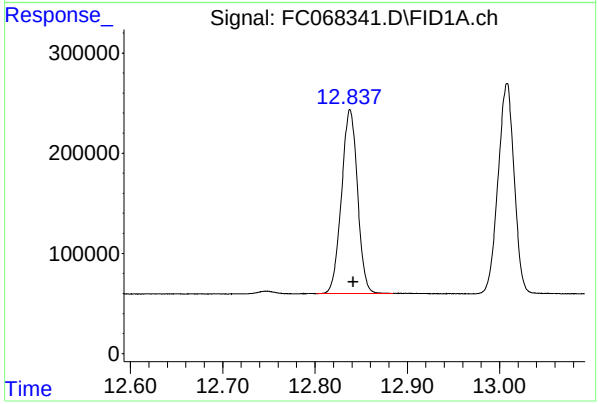

#10 n-Eicosane (C20)

R.T.: 12.397 min
Delta R.T.: -0.004 min
Response: 2613618
Conc: 20.06 ug/ml



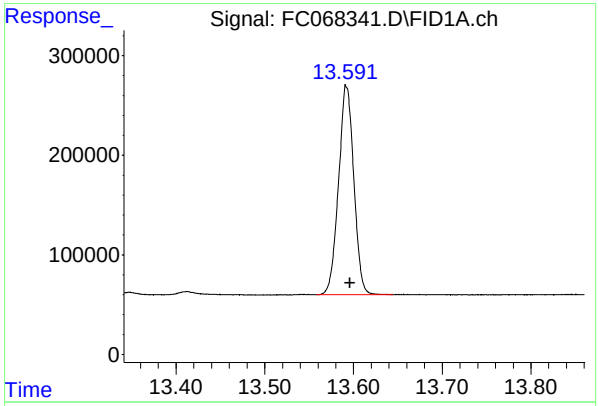

#11 n-Heneicosane (C21)

R.T.: 13.008 min
Delta R.T.: -0.003 min
Response: 2552338
Conc: 19.96 ug/ml




#12 1-chlorooctadecane (SURR)

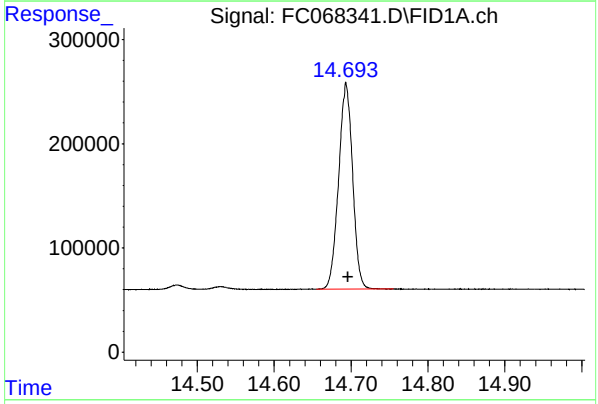
R.T.: 12.838 min
Delta R.T.: -0.004 min
Response: 2213113
Conc: 19.68 ug/ml




#13 n-Docosane (C22)

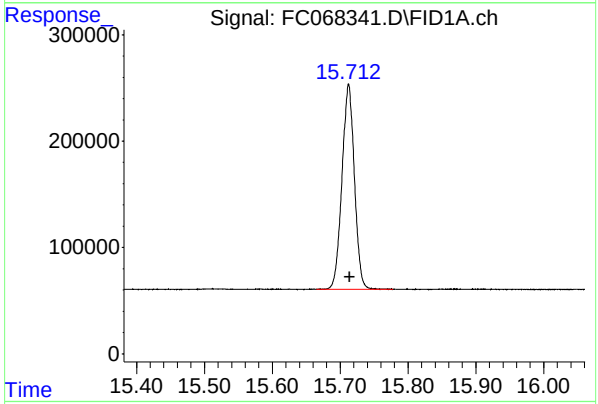
R.T.: 13.592 min
Delta R.T.: -0.004 min
Response: 2514482
Conc: 19.95 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD



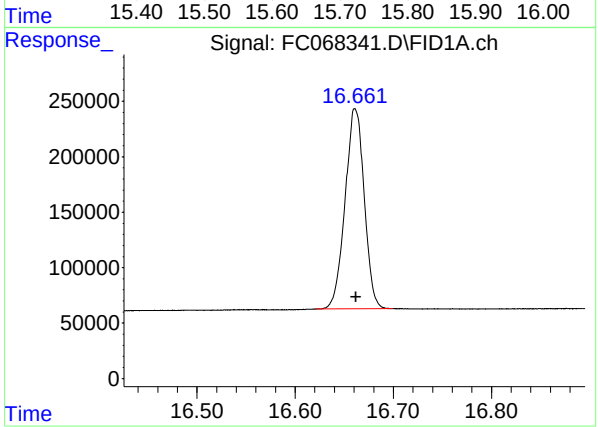

#14 n-Tetracosane (C24)

R.T.: 14.694 min
Delta R.T.: -0.002 min
Response: 2489195
Conc: 20.01 ug/ml



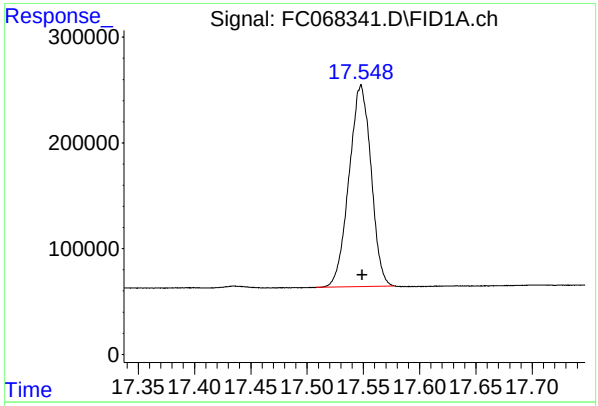

#15 n-Hexacosane (C26)

R.T.: 15.712 min
Delta R.T.: -0.001 min
Response: 2451970
Conc: 20.17 ug/ml




#16 n-Octacosane (C28)

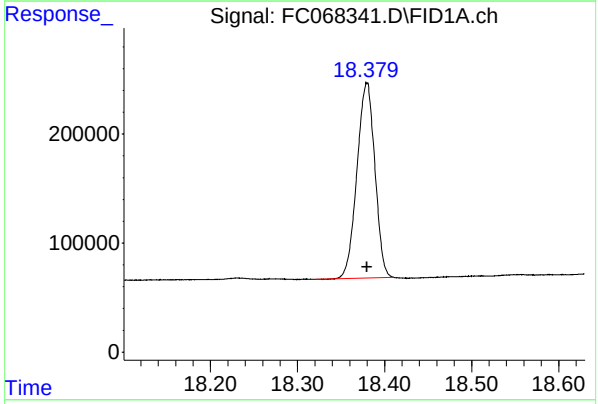
R.T.: 16.661 min
Delta R.T.: 0.000 min
Response: 2449009
Conc: 20.62 ug/ml




#17 n-Tricontane (C30)

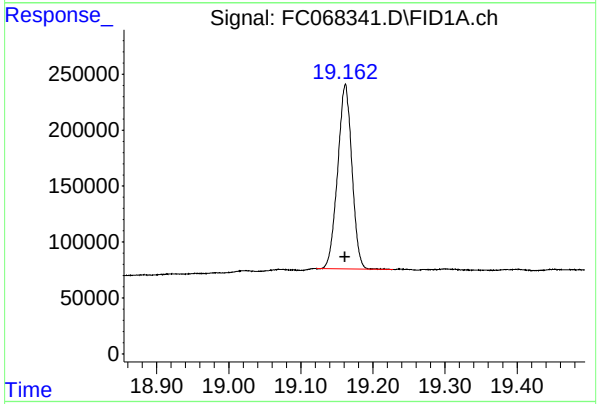
R.T.: 17.548 min
Delta R.T.: -0.001 min
Response: 2590876
Conc: 21.52 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD



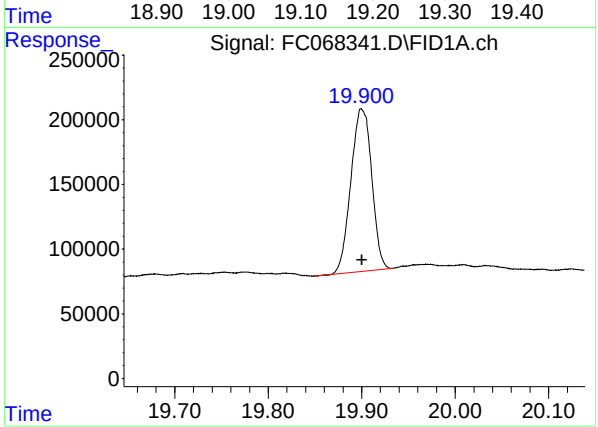

#18 n-Dotriacontane (C32)

R.T.: 18.379 min
Delta R.T.: 0.000 min
Response: 2561161
Conc: 22.07 ug/ml



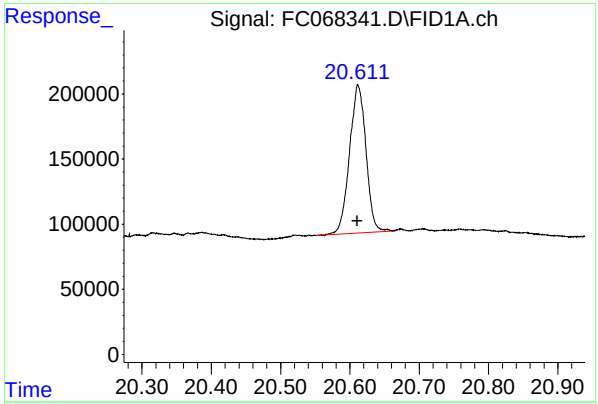

#19 n-Tetratriacontane (C34)

R.T.: 19.162 min
Delta R.T.: 0.000 min
Response: 2275964
Conc: 21.06 ug/ml




#20 n-Hexatriacontane (C36)

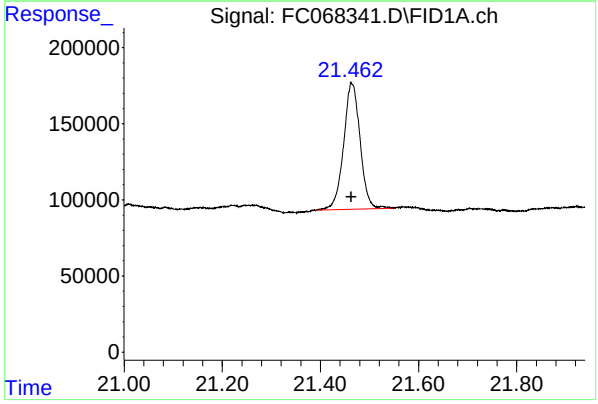
R.T.: 19.901 min
Delta R.T.: 0.000 min
Response: 1942697
Conc: 20.20 ug/ml




#21 n-Octatriacontane (C38)

R.T.: 20.612 min
Delta R.T.: 0.001 min
Response: 1869920
Conc: 20.80 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
20 PPM ALIPHATIC HC STD




#22 n-Tetracontane (C40)

R.T.: 21.464 min
Delta R.T.: 0.002 min
Response: 1933632
Conc: 22.35 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022825AL\
Data File : FC068341.D
Signal(s) : FID1A.ch
Acq On : 28 Feb 2025 23:50
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Title : GC Extractables

Signal : FID1A.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 3.204 | 3.161 | 3.261 | BB | 338058 | 2821805 | 91.60% | 5.016% |
| 2 | 4.261 | 4.225 | 4.318 | BB | 314575 | 2860924 | 92.87% | 5.085% |
| 3 | 5.827 | 5.798 | 5.908 | BB | 328122 | 3080505 | 100.00% | 5.476% |
| 4 | 6.268 | 6.235 | 6.331 | BB | 288254 | 2826957 | 91.77% | 5.025% |
| 5 | 6.879 | 6.848 | 6.968 | BB | 283364 | 2905424 | 94.32% | 5.165% |
| 6 | 8.057 | 8.028 | 8.125 | BB | 256157 | 2729025 | 88.59% | 4.851% |
| 7 | 9.652 | 9.618 | 9.718 | BB | 241605 | 2752162 | 89.34% | 4.892% |
| 8 | 11.091 | 11.051 | 11.155 | BB | 240300 | 2750082 | 89.27% | 4.888% |
| 9 | 11.395 | 11.338 | 11.448 | BV | 285697 | 3019061 | 98.01% | 5.367% |
| 10 | 12.397 | 12.358 | 12.461 | BB | 223409 | 2613618 | 84.84% | 4.646% |
| 11 | 12.838 | 12.801 | 12.885 | BB | 183559 | 2213113 | 71.84% | 3.934% |
| 12 | 13.008 | 12.971 | 13.071 | BB | 210182 | 2552338 | 82.85% | 4.537% |
| 13 | 13.592 | 13.558 | 13.645 | BB | 211199 | 2514482 | 81.63% | 4.470% |
| 14 | 14.694 | 14.655 | 14.755 | BB | 196198 | 2489195 | 80.80% | 4.425% |
| 15 | 15.712 | 15.665 | 15.778 | BB | 190792 | 2451970 | 79.60% | 4.358% |
| 16 | 16.661 | 16.598 | 16.725 | BB | 181305 | 2473080 | 80.28% | 4.396% |
| 17 | 17.548 | 17.468 | 17.591 | BB | 189878 | 2604736 | 84.56% | 4.630% |
| 18 | 18.379 | 18.298 | 18.428 | BV | 178580 | 2576732 | 83.65% | 4.580% |
| 19 | 19.162 | 19.121 | 19.228 | BB | 164314 | 2275964 | 73.88% | 4.046% |
| 20 | 19.901 | 19.851 | 19.933 | BV | 124554 | 1942697 | 63.06% | 3.453% |
| 21 | 20.612 | 20.551 | 20.662 | BV | 113774 | 1869920 | 60.70% | 3.324% |
| 22 | 21.464 | 21.391 | 21.548 | BV | 82303 | 1933632 | 62.77% | 3.437% |
| | | | Sum of corrected areas: | | | 56257421 | | |

Aliphatic EPH 021125.M Sat Mar 01 01:25:09 2025

Evaluate Continuing Calibration Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022825AL\
Data File : FC068341.D
Signal(s) : FID1A.ch
Acq On : 28 Feb 2025 23:50
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
FID_C
**LabSampleId :**
20 PPM ALIPHATIC HC STD

Integration File: autoint1.e
Quant Time: Mar 05 05:26:03 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 1 | T | n-Nonane (C9) | 140.677 | 141.090 E3 | -0.3 | 100 | 0.00 |
| 2 | T | n-Decane (C10) | 141.671 | 143.046 E3 | -1.0 | 100 | 0.00 |
| 3 | T | A~Naphthalene (C11.7) | 153.034 | 154.025 E3 | -0.6 | 100 | 0.00 |
| 4 | T | n-Dodecane (C12) | 140.758 | 141.348 E3 | -0.4 | 100 | 0.00 |
| 5 | T | A~2-methylnaphthalene (C12. | 144.828 | 145.271 E3 | -0.3 | 99 | 0.00 |
| 6 | T | n-Tetradecane (C14) | 136.344 | 136.451 E3 | -0.1 | 100 | 0.00 |
| 7 | T | n-Hexadecane (C16) | 136.965 | 137.608 E3 | -0.5 | 100 | 0.00 |
| 8 | T | n-Octadecane (C18) | 136.758 | 137.504 E3 | -0.5 | 100 | 0.00 |
| 9 | S | ortho-Terphenyl (SURR) | 153.444 | 150.953 E3 | 1.6 | 98 | 0.00 |
| 10 | T | n-Eicosane (C20) | 130.287 | 130.681 E3 | -0.3 | 100 | 0.00 |
| 11 | T | n-Heneicosane (C21) | 127.847 | 127.617 E3 | 0.2 | 100 | 0.00 |
| 12 | S | 1-chlorooctadecane (SURR) | 112.474 | 110.656 E3 | 1.6 | 98 | 0.00 |
| 13 | T | n-Docosane (C22) | 126.028 | 125.724 E3 | 0.2 | 100 | 0.00 |
| 14 | T | n-Tetracosane (C24) | 124.377 | 124.460 E3 | -0.1 | 100 | 0.00 |
| 15 | T | n-Hexacosane (C26) | 121.593 | 122.598 E3 | -0.8 | 101 | 0.00 |
| 16 | T | n-Octacosane (C28) | 118.767 | 122.450 E3 | -3.1 | 103 | 0.00 |
| 17 | T | n-Tricontane (C30) | 120.366 | 129.544 E3 | -7.6 | 108 | 0.00 |
| 18 | T | n-Dotriacontane (C32) | 116.067 | 128.058 E3 | -10.3 | 111 | 0.00 |
| 19 | T | n-Tetratriacontane (C34) | 108.059 | 113.798 E3 | -5.3 | 106 | 0.00 |
| 20 | T | n-Hexatriacontane (C36) | 96.169 | 97.135 E3 | -1.0 | 101 | 0.00 |
| 21 | T | n-Octatriacontane (C38) | 89.898 | 93.496 E3 | -4.0 | 104 | 0.00 |
| 22 | T | n-Tetracontane (C40) | 86.520 | 96.682 E3 | -11.7 | 112 | 0.00 |

Evaluate Continuing Calibration Report - Not Founds

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(#) = Out of Range SPCC's out = 0 CCC's out = 0

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

# Continuing Calibration Report for SequenceID : FD022725AR

| Parameter | AreaCount | Conc. | RT_Min | RT_Max | Response Factor | AVGRF | %DEV |
|---|---|---|---|---|---|---|---|
| **File ID :** | **FD049114.D** | | | | | | |
| Aromatic C10-C12 | 6298689.000 | 40.000 | 4.076 | 5.794 | 157467.225 | 159020.606 | 0.977 |
| Aromatic C12-C16 | 9637650.000 | 60.000 | 5.795 | 8.397 | 160627.500 | 160935.866 | 0.192 |
| Aromatic C16-C21 | 11767518.000 | 80.000 | 8.398 | 12.661 | 147093.975 | 153359.309 | 4.085 |
| Aromatic C21-C36 | 25141948.000 | 180.000 | 12.662 | 18.071 | 139677.489 | 143114.753 | 2.402 |
| Aromatic EPH | 52845805.000 | 360.000 | 4.076 | 18.071 | 146793.903 | 150128.823 | 2.221 |

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

| | | | |
|---|---|---|---|
| Lab Sample ID: | 20 PPM AROMATIC HC S | Acq On: | 27 Feb 2025 08:35 |
| Client Sample ID: | | Operator: | YP/AJ |
| Data file: | FD049114.D | Misc: | |
| Instrument: | FID_D | ALS Vial: | 53 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | Units |
|---|---|---|---|---|---|
| Aromatic C10-C12 | 4.076 | 5.794 | 6298689.000 | 40.000 | ug/ml |
| Aromatic C12-C16 | 5.795 | 8.397 | 9637650.000 | 60.000 | ug/ml |
| Aromatic C16-C21 | 8.398 | 12.661 | 11767518.000 | 80.000 | ug/ml |
| Aromatic C21-C36 | 12.662 | 18.071 | 25141948.000 | 180.000 | ug/ml |
| Aromatic EPH | 4.076 | 18.071 | 52845805.000 | 360.000 | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022725AR\
Data File : FD049114.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2025 08:35
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD

Integration File: autoint1.e
Quant Time: Feb 28 01:24:55 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

| | Compound | R.T. | Response | Conc Units |
|---|---|---|---|---|
| | **System Monitoring Compounds** | | | |
| 4) | S 2-Bromonaphthalene (S... | 7.353 | 2835879 | 19.816 ug/ml |
| | Spiked Amount 50.000 | | Recovery = | 39.63% |
| 6) | S 2-Flurobiphenyl (SURR) | 8.205 | 1696777 | 19.301 ug/ml |
| | Spiked Amount 50.000 Range 0 - 131 | | Recovery = | 38.60% |
| 11) | S ortho-Terphenyl (SURR) | 11.234 | 3254119 | 20.115 ug/ml |
| | Spiked Amount 50.000 | | Recovery = | 40.23% |
| | **Target Compounds** | | | |
| 1) | T 1,2,3-Trimethylbenzen... | 4.176 | 3129961 | 19.654 ug/ml |
| 2) | T Naphthalene (C11.7) | 5.694 | 3168728 | 19.956 ug/ml |
| 3) | T 2-Methylnaphthalene (... | 6.740 | 3132399 | 20.119 ug/ml |
| 5) | T Acenaphthylene (C15.06) | 8.004 | 3201654 | 19.690 ug/ml |
| 7) | T Acenaphthene (C15.5) | 8.297 | 3303597 | 20.082 ug/ml |
| 8) | T Flouorene (C16.55) | 9.077 | 3097250 | 19.646 ug/ml |
| 9) | T Phenanthrene (C19.36) | 10.464 | 3016596 | 20.017 ug/ml |
| 10) | T Anthracene (C19.43) | 10.542 | 2640174 | 17.481 ug/ml |
| 12) | T Fluoranthene (C21.85) | 12.268 | 3082957 | 19.978 ug/ml |
| 13) | T Pyrene (C20.8) | 12.561 | 3013498 | 19.561 ug/ml |
| 14) | T Benzo[a]anthracene (C... | 14.431 | 2576874 | 19.612 ug/ml |
| 15) | T Chrysene (C27.41) | 14.471 | 3205576 | 19.826 ug/ml |
| 16) | T benzo[b]fluoranthene ... | 15.978 | 2751715 | 19.999 ug/ml |
| 17) | T Bnezo[k]fluoranthene ... | 16.009 | 3150651 | 19.948 ug/ml |
| 18) | T Benzo[a]pyrene (C31.34) | 16.358 | 2640040 | 19.450 ug/ml |
| 19) | T Indeno[1,2,3-cd]pyren... | 17.725 | 1896060 | 17.351 ug/ml |
| 20) | T Dibenz[a,h]anthracene... | 17.765 | 3093462 | 19.940 ug/ml |
| 21) | T Benzo[g,h,i]perylene ... | 17.971 | 2744613 | 18.935 ug/ml |

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

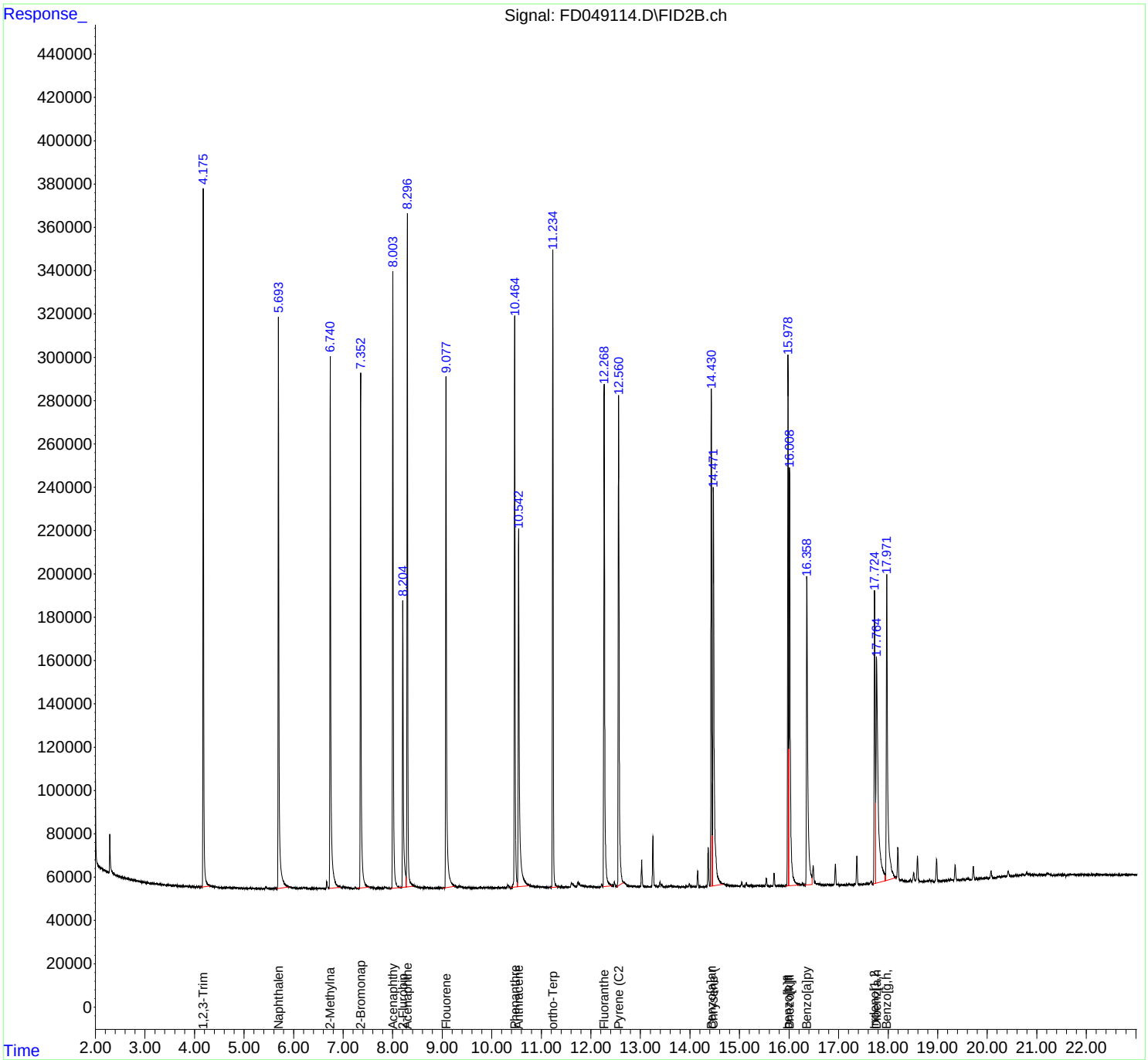
Quantitation Report (QT Reviewed)

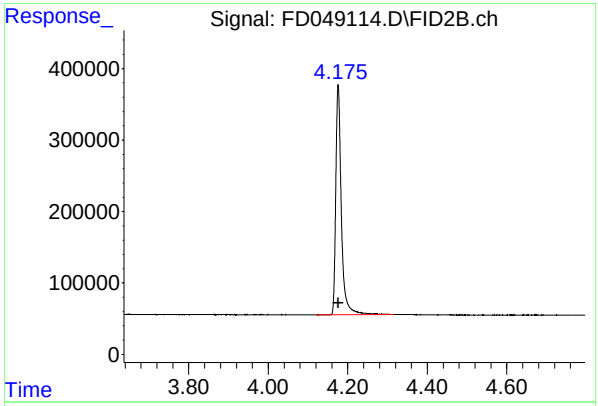
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022725AR\
Data File : FD049114.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2025 08:35
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD

Integration File: autoint1.e
Quant Time: Feb 28 01:24:55 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

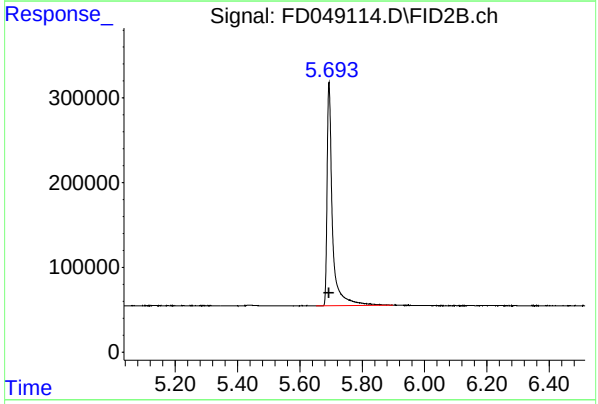





#1 1,2,3-Trimethylbenzene (C10.1)

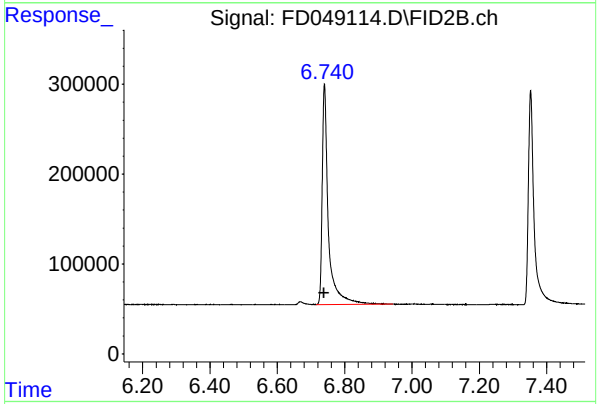
R.T.: 4.176 min
Delta R.T.: 0.000 min
Response: 3129961
Conc: 19.65 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD



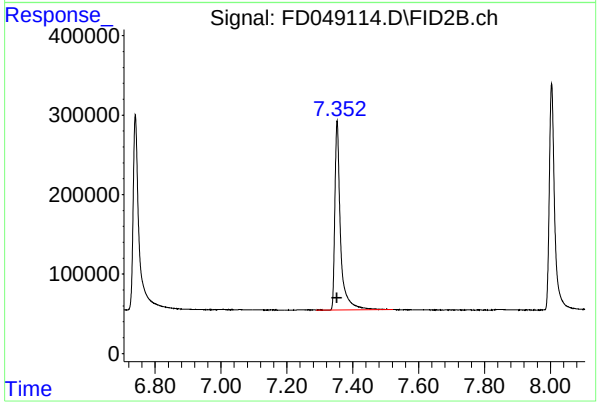

#2 Naphthalene (C11.7)

R.T.: 5.694 min
Delta R.T.: 0.000 min
Response: 3168728
Conc: 19.96 ug/ml



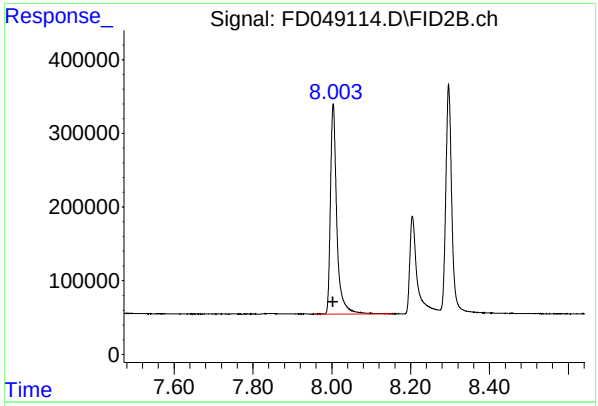

#3 2-Methylnaphthalene (C12.89)

R.T.: 6.740 min
Delta R.T.: 0.001 min
Response: 3132399
Conc: 20.12 ug/ml




#4 2-Bromonaphthalene (SURR)

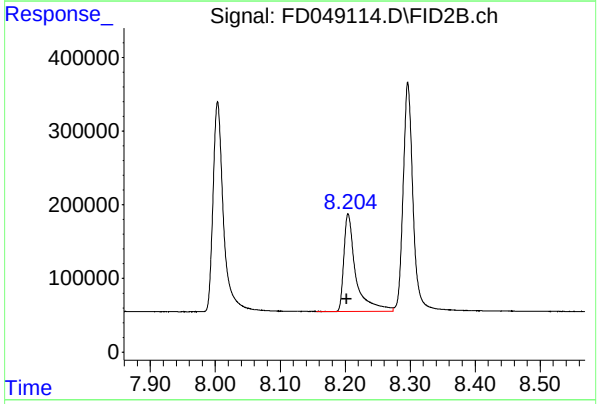
R.T.: 7.353 min
Delta R.T.: 0.001 min
Response: 2835879
Conc: 19.82 ug/ml




#5 Acenaphthylene (C15.06)

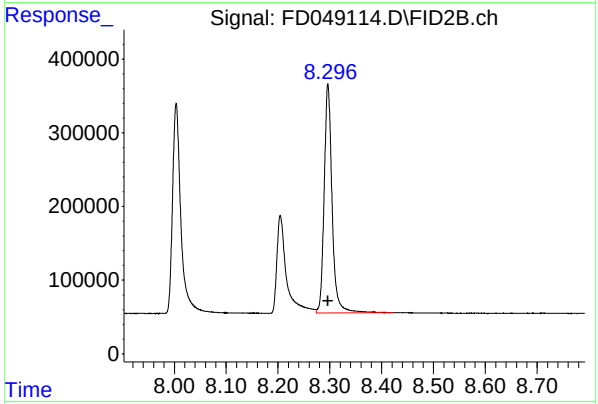
R.T.: 8.004 min
Delta R.T.: 0.000 min
Response: 3201654
Conc: 19.69 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD



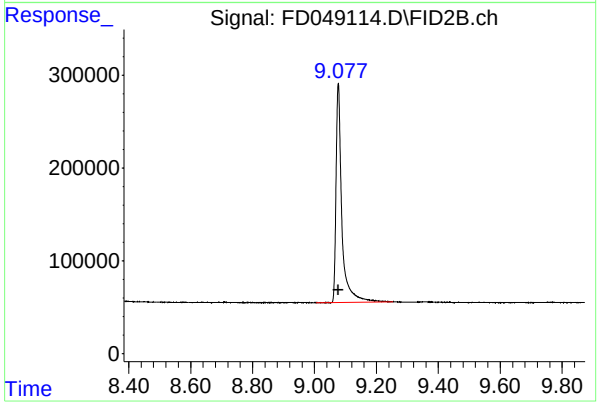

#6 2-Flurobiphenyl (SURR)

R.T.: 8.205 min
Delta R.T.: 0.002 min
Response: 1696777
Conc: 19.30 ug/ml



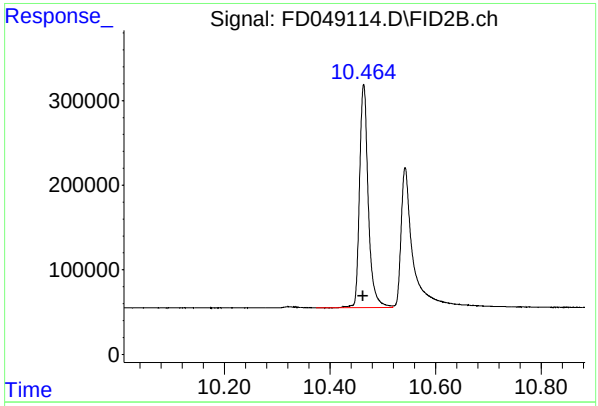

#7 Acenaphthene (C15.5)

R.T.: 8.297 min
Delta R.T.: 0.000 min
Response: 3303597
Conc: 20.08 ug/ml




#8 Flouorene (C16.55)

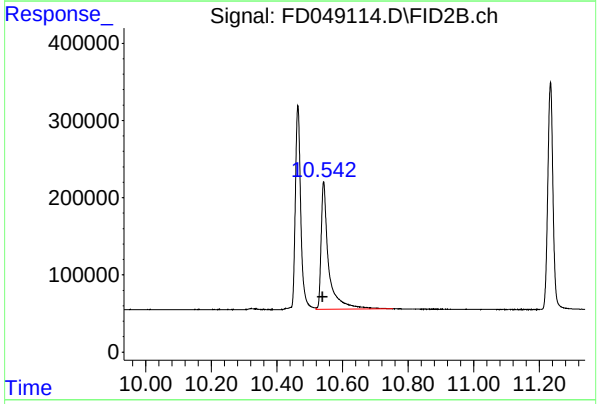
R.T.: 9.077 min
Delta R.T.: 0.000 min
Response: 3097250
Conc: 19.65 ug/ml




#9 Phenanthrene (C19.36)

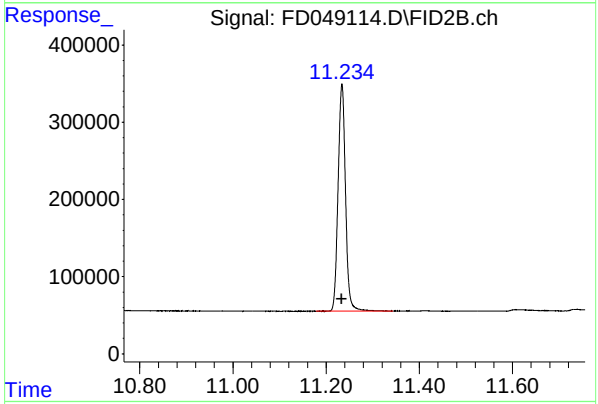
R.T.: 10.464 min
Delta R.T.: 0.001 min
Response: 3016596
Conc: 20.02 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD



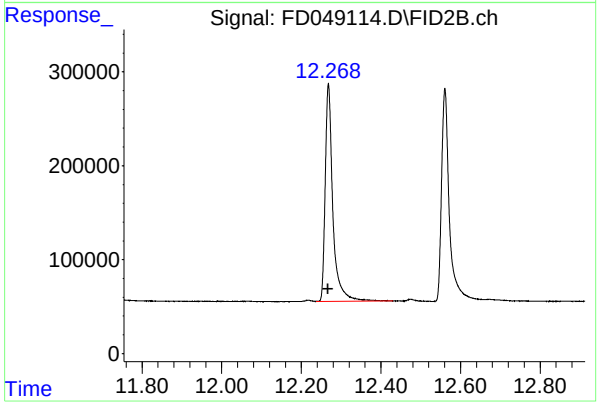

#10 Anthracene (C19.43)

R.T.: 10.542 min
Delta R.T.: 0.003 min
Response: 2640174
Conc: 17.48 ug/ml



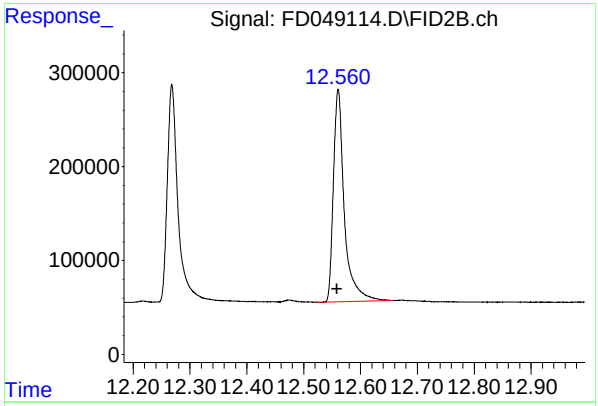

#11 ortho-Terphenyl (SURR)

R.T.: 11.234 min
Delta R.T.: 0.000 min
Response: 3254119
Conc: 20.12 ug/ml




#12 Fluoranthene (C21.85)

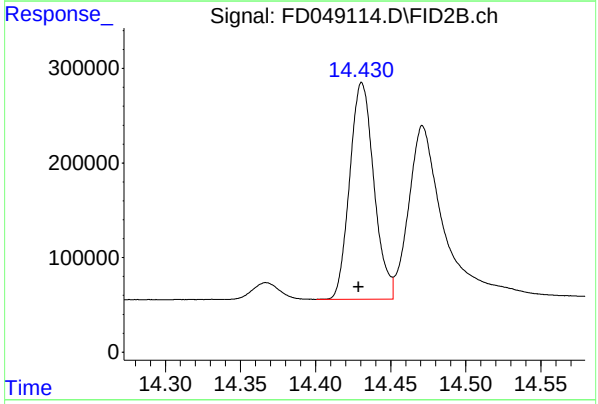
R.T.: 12.268 min
Delta R.T.: 0.001 min
Response: 3082957
Conc: 19.98 ug/ml




#13 Pyrene (C20.8)

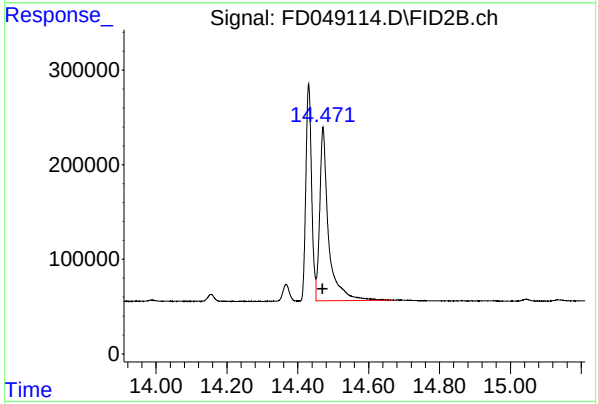
R.T.: 12.561 min
Delta R.T.: 0.002 min
Response: 3013498
Conc: 19.56 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD



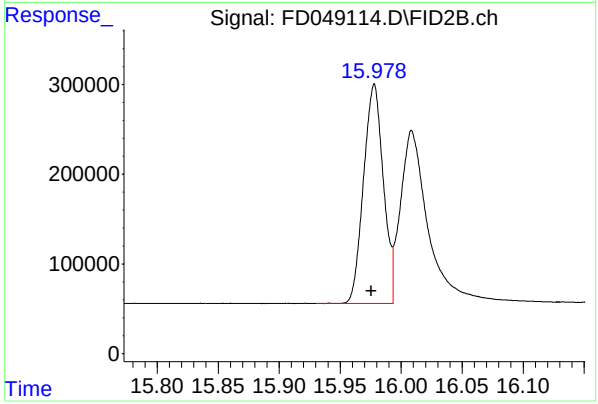

#14 Benzo[a]anthracene (C26.37)

R.T.: 14.431 min
Delta R.T.: 0.002 min
Response: 2576874
Conc: 19.61 ug/ml



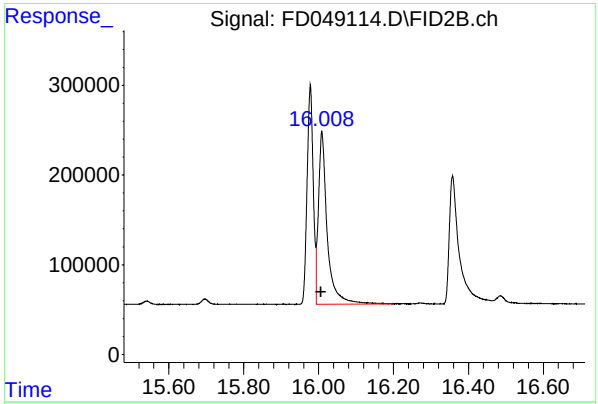

#15 Chrysene (C27.41)

R.T.: 14.471 min
Delta R.T.: 0.002 min
Response: 3205576
Conc: 19.83 ug/ml




#16 benzo[b]fluoranthene (C30.41)

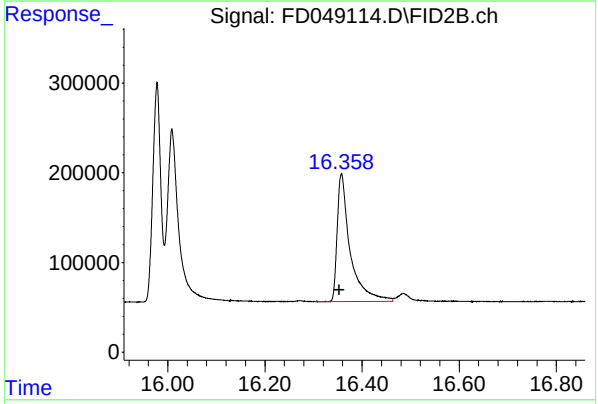
R.T.: 15.978 min
Delta R.T.: 0.002 min
Response: 2751715
Conc: 20.00 ug/ml




#17 Bnezo[k]fluoranthene (C30.14)

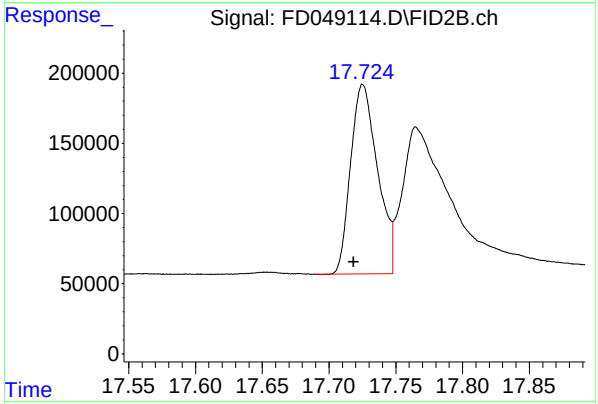
R.T.: 16.009 min
Delta R.T.: 0.003 min
Response: 3150651
Conc: 19.95 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD



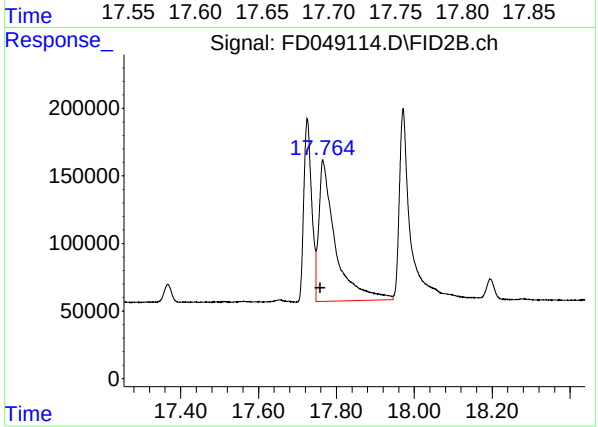

#18 Benzo[a]pyrene (C31.34)

R.T.: 16.358 min
Delta R.T.: 0.004 min
Response: 2640040
Conc: 19.45 ug/ml



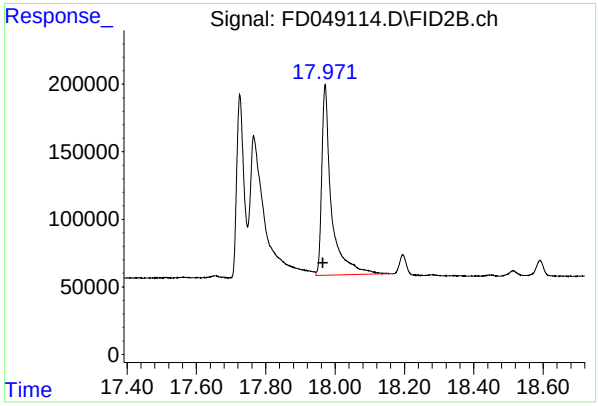

#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.725 min
Delta R.T.: 0.007 min
Response: 1896060
Conc: 17.35 ug/ml




#20 Dibenz[a,h]anthracene (C30.36)

R.T.: 17.765 min
Delta R.T.: 0.006 min
Response: 3093462
Conc: 19.94 ug/ml




#21 Benzo[g,h,i]perylene (C34.01)

R.T.: 17.971 min
Delta R.T.: 0.006 mi
Response: 2744613
Conc: 18.93 ug/m

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022725AR\
Data File : FD049114.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2025 08:35
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Title : GC Extractables

Signal : FID2B.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 4.176 | 4.120 | 4.314 | BB | 322180 | 3129961 | 94.74% | 5.162% |
| 2 | 5.694 | 5.652 | 5.899 | BB | 263352 | 3168728 | 95.92% | 5.226% |
| 3 | 6.740 | 6.715 | 6.944 | PB | 245255 | 3132399 | 94.82% | 5.166% |
| 4 | 7.353 | 7.289 | 7.522 | BB | 238265 | 2835879 | 85.84% | 4.677% |
| 5 | 8.004 | 7.960 | 8.155 | BB | 285000 | 3201654 | 96.91% | 5.280% |
| 6 | 8.205 | 8.155 | 8.274 | BV | 131835 | 1696777 | 51.36% | 2.798% |
| 7 | 8.297 | 8.274 | 8.422 | VB | 309923 | 3303597 | 100.00% | 5.449% |
| 8 | 9.077 | 9.005 | 9.254 | BB | 236092 | 3097250 | 93.75% | 5.108% |
| 9 | 10.464 | 10.374 | 10.519 | BV | 263761 | 3016596 | 91.31% | 4.975% |
| 10 | 10.542 | 10.519 | 10.754 | VB | 165391 | 2640174 | 79.92% | 4.354% |
| 11 | 11.234 | 11.179 | 11.344 | BB | 294087 | 3254119 | 98.50% | 5.367% |
| 12 | 12.268 | 12.237 | 12.430 | VB | 231514 | 3082957 | 93.32% | 5.085% |
| 13 | 12.561 | 12.522 | 12.657 | BV | 226512 | 3013498 | 91.22% | 4.970% |
| 14 | 14.431 | 14.400 | 14.452 | VV | 229500 | 2576874 | 78.00% | 4.250% |
| 15 | 14.471 | 14.452 | 14.669 | VV | 183135 | 3205576 | 97.03% | 5.287% |
| 16 | 15.978 | 15.930 | 15.993 | BV | 245442 | 2751715 | 83.29% | 4.538% |
| 17 | 16.009 | 15.993 | 16.198 | VB | 192903 | 3150651 | 95.37% | 5.196% |
| 18 | 16.358 | 16.305 | 16.463 | BV | 142263 | 2640040 | 79.91% | 4.354% |
| 19 | 17.725 | 17.690 | 17.748 | BV | 135279 | 1896060 | 57.39% | 3.127% |
| 20 | 17.765 | 17.748 | 17.945 | VV | 104402 | 3093462 | 93.64% | 5.102% |
| 21 | 17.971 | 17.945 | 18.167 | VV | 141379 | 2744613 | 83.08% | 4.527% |
| | | | Sum of corrected areas: | | | 60632579 | | |

Aromatic EPH 021125.M Fri Feb 28 01:55:56 2025

Evaluate Continuing Calibration Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022725AR\
Data File : FD049114.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2025 08:35
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

**Instrument :**
FID_D
**LabSampleId :**
20 PPM AROMATIC HC STD

Integration File: autoint1.e
Quant Time: Feb 28 01:24:55 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 1 | T | 1,2,3-Trimethylbenzene (C10 | 159.254 | 156.498 | E3 | 1.7 | 100 | 0.00 |
| 2 | T | Naphthalene (C11.7) | 158.788 | 158.436 | E3 | 0.2 | 101 | 0.00 |
| 3 | T | 2-Methylnaphthalene (C12.89 | 155.693 | 156.620 | E3 | -0.6 | 101 | 0.00 |
| 4 | S | 2-Bromonaphthalene (SURR) | 143.109 | 141.794 | E3 | 0.9 | 100 | 0.00 |
| 5 | T | Acenaphthylene (C15.06) | 162.606 | 160.083 | E3 | 1.6 | 100 | 0.00 |
| 6 | S | 2-Flurobiphenyl (SURR) | 87.912 | 84.839 | E3 | 3.5 | 95 | 0.00 |
| 7 | T | Acenaphthene (C15.5) | 164.509 | 165.180 | E3 | -0.4 | 103 | 0.00 |
| 8 | T | Flouorene (C16.55) | 157.649 | 154.862 | E3 | 1.8 | 99 | 0.00 |
| 9 | T | Phenanthrene (C19.36) | 150.701 | 150.830 | E3 | -0.1 | 101 | 0.00 |
| 10 | T | Anthracene (C19.43) | 151.028 | 132.009 | E3 | 12.6 | 88 | 0.00 |
| 11 | S | ortho-Terphenyl (SURR) | 161.774 | 162.706 | E3 | -0.6 | 102 | 0.00 |
| 12 | T | Fluoranthene (C21.85) | 154.315 | 154.148 | E3 | 0.1 | 100 | 0.00 |
| 13 | T | Pyrene (C20.8) | 154.058 | 150.675 | E3 | 2.2 | 100 | 0.00 |
| 14 | T | Benzo[a]anthracene (C26.37) | 131.390 | 128.844 | E3 | 1.9 | 95 | 0.00 |
| 15 | T | Chrysene (C27.41) | 161.687 | 160.279 | E3 | 0.9 | 103 | 0.00 |
| 16 | T | benzo[b]fluoranthene (C30.4 | 137.594 | 137.586 | E3 | 0.0 | 98 | 0.00 |
| 17 | T | Bnezo[k]fluoranthene (C30.1 | 157.942 | 157.533 | E3 | 0.3 | 104 | 0.00 |
| 18 | T | Benzo[a]pyrene (C31.34) | 135.737 | 132.002 | E3 | 2.8 | 98 | 0.00 |
| 19 | T | Indeno[1,2,3-cd]pyrene (C35 | 109.277 | 94.803 | E3 | 13.2 | 88 | 0.00 |
| 20 | T | Dibenz[a,h]anthracene (C30. | 155.140 | 154.673 | E3 | 0.3 | 100 | 0.00 |
| 21 | T | Benzo[g,h,i]perylene (C34.0 | 144.951 | 137.231 | E3 | 5.3 | 97 | 0.00 |

Evaluate Continuing Calibration Report - Not Founds

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(#) = Out of Range SPCC's out = 0 CCC's out = 0

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

# Continuing Calibration Report for SequenceID : FD022725AR

| Parameter | AreaCount | Conc. | RT_Min | RT_Max | Response Factor | AVGRF | %DEV |
|---|---|---|---|---|---|---|---|
| **File ID :** | **FD049120.D** | | | | | | |
| Aromatic C10-C12 | 6229425.000 | 40.000 | 4.076 | 5.794 | 155735.625 | 159020.606 | 2.066 |
| Aromatic C12-C16 | 9514645.000 | 60.000 | 5.795 | 8.397 | 158577.417 | 160935.866 | 1.465 |
| Aromatic C16-C21 | 11756074.000 | 80.000 | 8.398 | 12.661 | 146950.925 | 153359.309 | 4.179 |
| Aromatic C21-C36 | 25098023.000 | 180.000 | 12.662 | 18.071 | 139433.461 | 143114.753 | 2.572 |
| Aromatic EPH | 52598167.000 | 360.000 | 4.076 | 18.071 | 146106.019 | 150128.823 | 2.680 |

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

| | | | |
|---|---|---|---|
| Lab Sample ID: | 20 PPM AROMATIC HC S | Acq On: | 27 Feb 2025 13:27 |
| Client Sample ID: | | Operator: | YP/AJ |
| Data file: | FD049120.D | Misc: | |
| Instrument: | FID_D | ALS Vial: | 53 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | Units |
|---|---|---|---|---|---|
| Aromatic C10-C12 | 4.076 | 5.794 | 6229425.000 | 40.000 | ug/ml |
| Aromatic C12-C16 | 5.795 | 8.397 | 9514645.000 | 60.000 | ug/ml |
| Aromatic C16-C21 | 8.398 | 12.661 | 11756074.000 | 80.000 | ug/ml |
| Aromatic C21-C36 | 12.662 | 18.071 | 25098023.000 | 180.000 | ug/ml |
| Aromatic EPH | 4.076 | 18.071 | 52598167.000 | 360.000 | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022725AR\
Data File : FD049120.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2025 13:27
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD

Integration File: autoint1.e
Quant Time: Feb 28 01:27:00 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

| | Compound | R.T. | Response | Conc Units |
|---|---|---|---|---|
| | **System Monitoring Compounds** | | | |
| 4) | S 2-Bromonaphthalene (S... | 7.353 | 2797961 | 19.551 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 39.10% |
| 6) | S 2-Flurobiphenyl (SURR) | 8.205 | 1681726 | 19.130 ug/ml |
| Spiked Amount | 50.000 Range | 0 - 131 | Recovery = | 38.26% |
| 11) | S ortho-Terphenyl (SURR) | 11.234 | 3233823 | 19.990 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 39.98% |
| | **Target Compounds** | | | |
| 1) | T 1,2,3-Trimethylbenzen... | 4.176 | 3104083 | 19.491 ug/ml |
| 2) | T Naphthalene (C11.7) | 5.694 | 3125342 | 19.683 ug/ml |
| 3) | T 2-Methylnaphthalene (... | 6.741 | 3098648 | 19.902 ug/ml |
| 5) | T Acenaphthylene (C15.06) | 8.004 | 3151413 | 19.381 ug/ml |
| 7) | T Acenaphthene (C15.5) | 8.297 | 3264584 | 19.844 ug/ml |
| 8) | T Flouorene (C16.55) | 9.078 | 3082178 | 19.551 ug/ml |
| 9) | T Phenanthrene (C19.36) | 10.464 | 3019229 | 20.035 ug/ml |
| 10) | T Anthracene (C19.43) | 10.543 | 2633827 | 17.439 ug/ml |
| 12) | T Fluoranthene (C21.85) | 12.268 | 3086798 | 20.003 ug/ml |
| 13) | T Pyrene (C20.8) | 12.560 | 3020840 | 19.608 ug/ml |
| 14) | T Benzo[a]anthracene (C... | 14.431 | 2581314 | 19.646 ug/ml |
| 15) | T Chrysene (C27.41) | 14.472 | 3225972 | 19.952 ug/ml |
| 16) | T benzo[b]fluoranthene ... | 15.979 | 2759362 | 20.054 ug/ml |
| 17) | T Bnezo[k]fluoranthene ... | 16.010 | 3129958 | 19.817 ug/ml |
| 18) | T Benzo[a]pyrene (C31.34) | 16.359 | 2619384 | 19.298 ug/ml |
| 19) | T Indeno[1,2,3-cd]pyren... | 17.726 | 1884461 | 17.245 ug/ml |
| 20) | T Dibenz[a,h]anthracene... | 17.767 | 3072254 | 19.803 ug/ml |
| 21) | T Benzo[g,h,i]perylene ... | 17.971 | 2738520 | 18.893 ug/ml |

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

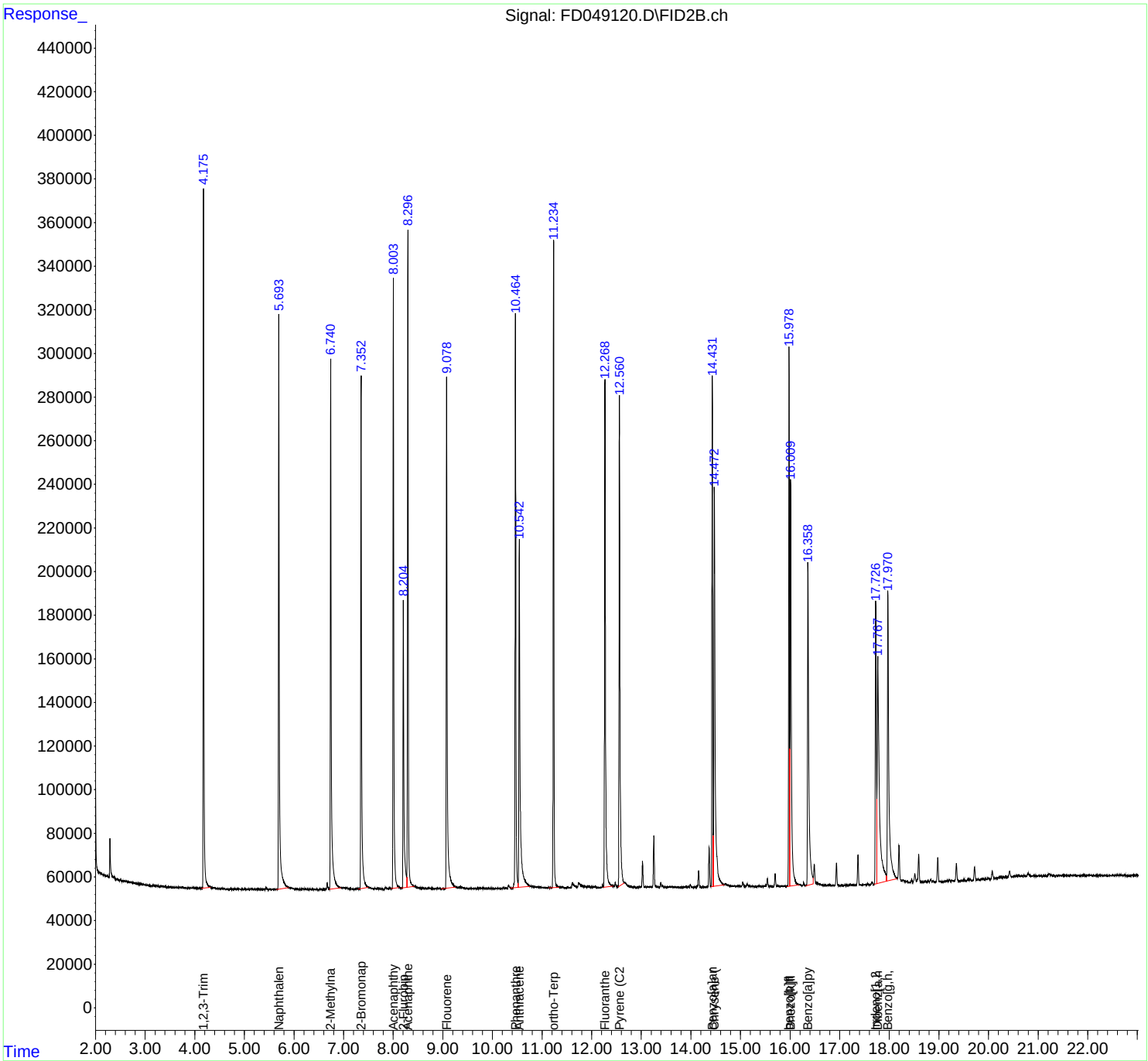
Quantitation Report (QT Reviewed)

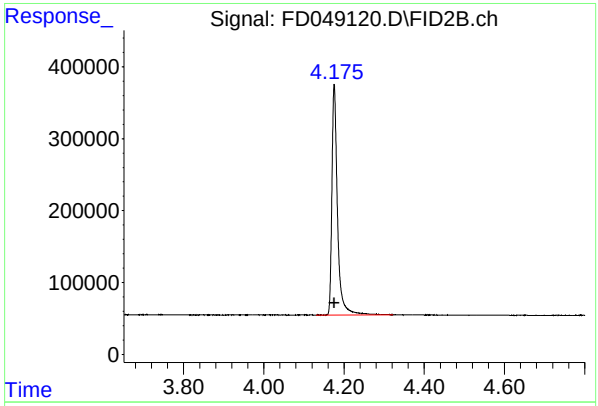
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022725AR\
Data File : FD049120.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2025 13:27
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD

Integration File: autoint1.e
Quant Time: Feb 28 01:27:00 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

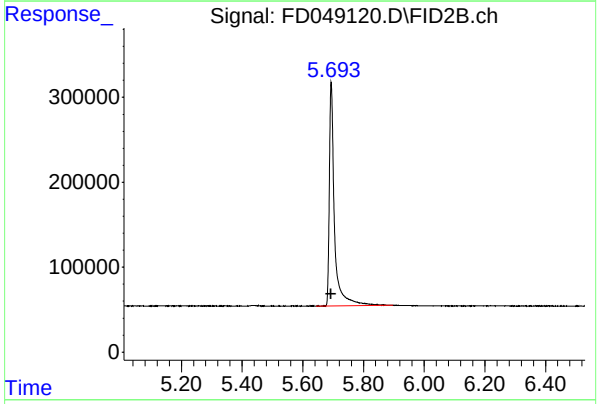





#1 1,2,3-Trimethylbenzene (C10.1)

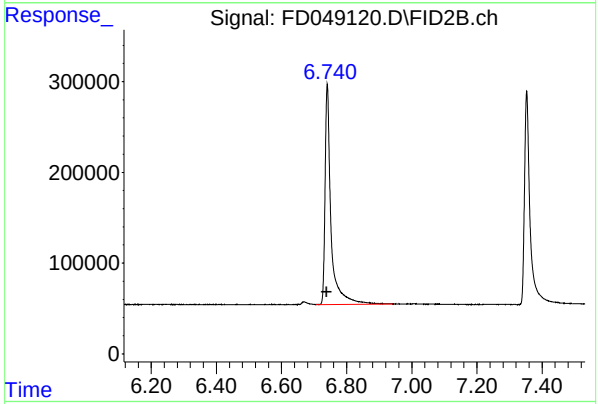
R.T.: 4.176 min
Delta R.T.: 0.000 min
Response: 3104083
Conc: 19.49 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD



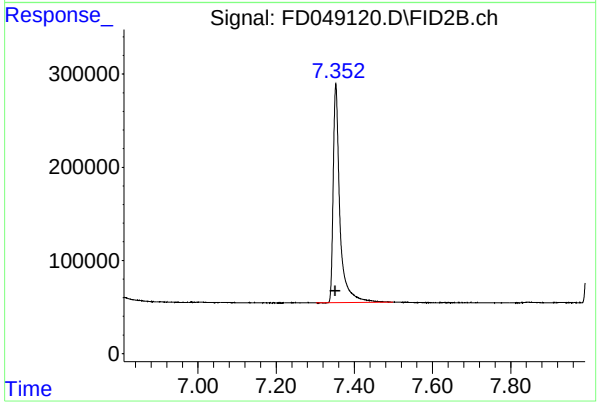

#2 Naphthalene (C11.7)

R.T.: 5.694 min
Delta R.T.: 0.000 min
Response: 3125342
Conc: 19.68 ug/ml



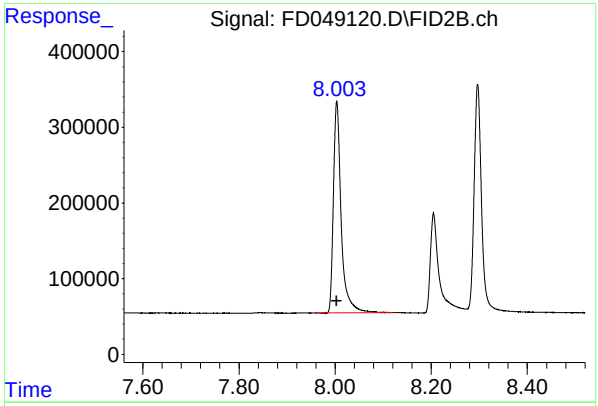

#3 2-Methylnaphthalene (C12.89)

R.T.: 6.741 min
Delta R.T.: 0.002 min
Response: 3098648
Conc: 19.90 ug/ml




#4 2-Bromonaphthalene (SURR)

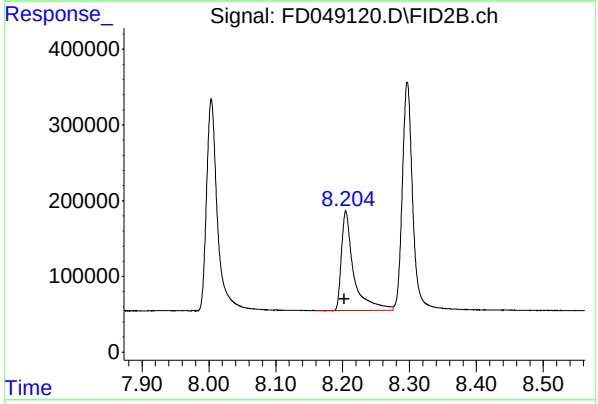
R.T.: 7.353 min
Delta R.T.: 0.001 min
Response: 2797961
Conc: 19.55 ug/ml




#5 Acenaphthylene (C15.06)

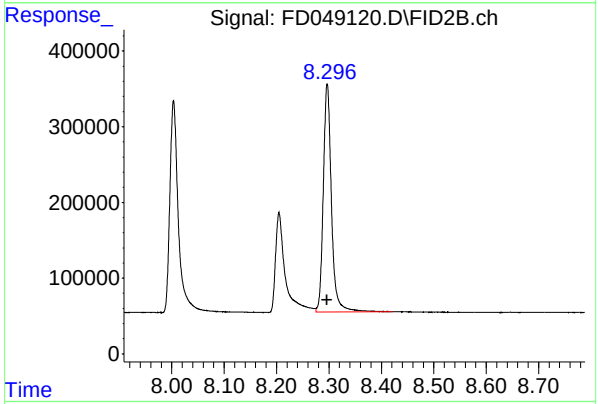
R.T.: 8.004 min
Delta R.T.: 0.000 min
Response: 3151413
Conc: 19.38 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD



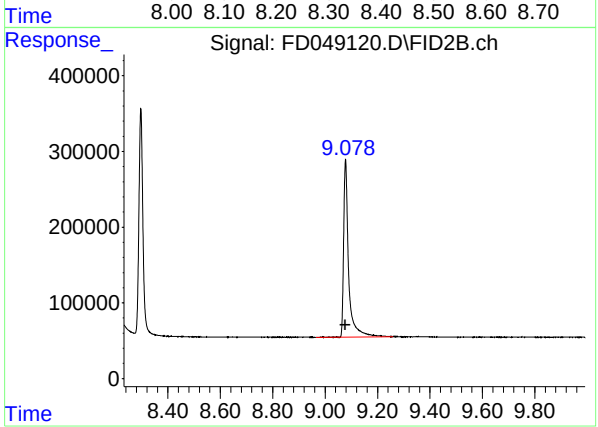

#6 2-Flurobiphenyl (SURR)

R.T.: 8.205 min
Delta R.T.: 0.003 min
Response: 1681726
Conc: 19.13 ug/ml



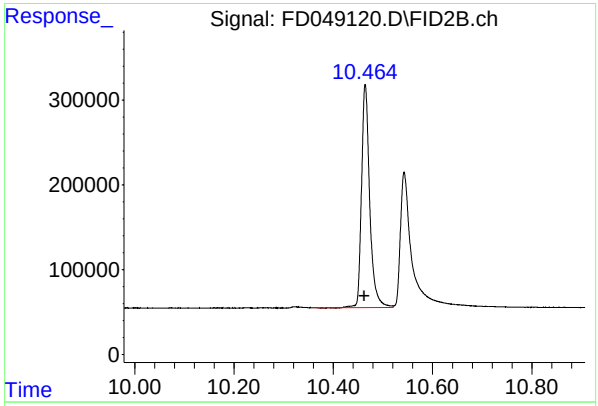

#7 Acenaphthene (C15.5)

R.T.: 8.297 min
Delta R.T.: 0.000 min
Response: 3264584
Conc: 19.84 ug/ml




#8 Flouorene (C16.55)

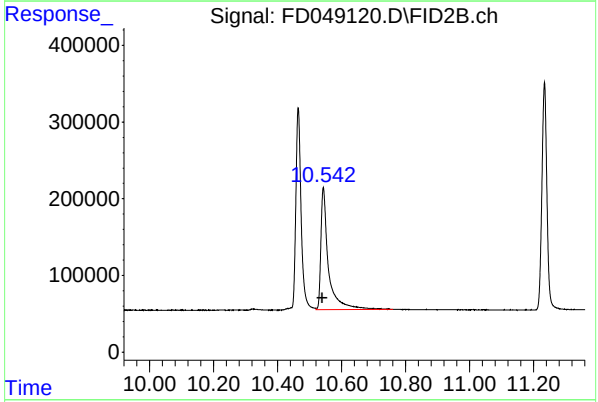
R.T.: 9.078 min
Delta R.T.: 0.002 min
Response: 3082178
Conc: 19.55 ug/ml




#9 Phenanthrene (C19.36)

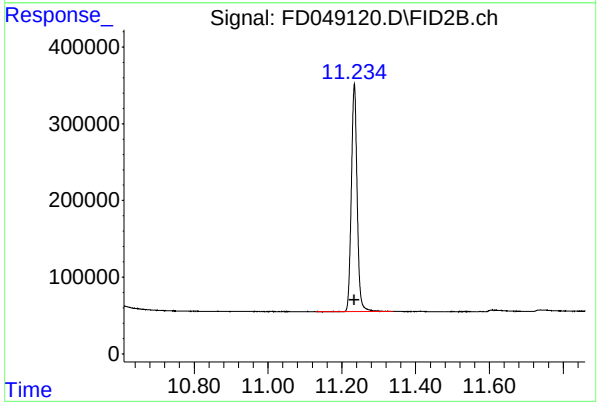
R.T.: 10.464 min
Delta R.T.: 0.002 min
Response: 3019229
Conc: 20.03 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD



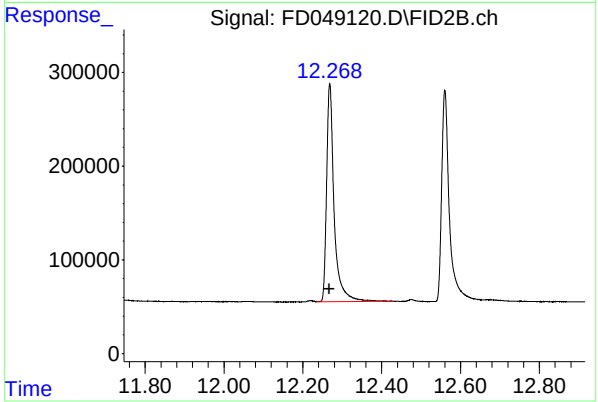

#10 Anthracene (C19.43)

R.T.: 10.543 min
Delta R.T.: 0.003 min
Response: 2633827
Conc: 17.44 ug/ml



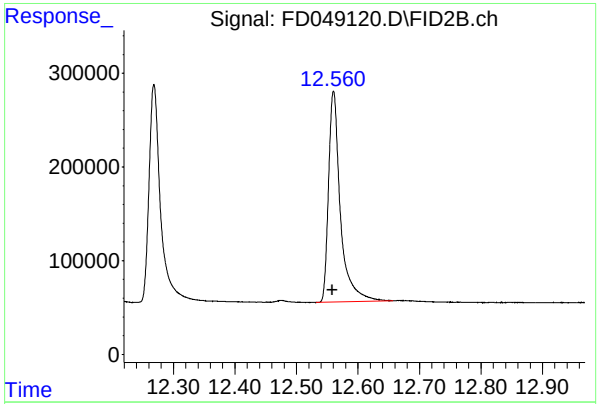

#11 ortho-Terphenyl (SURR)

R.T.: 11.234 min
Delta R.T.: 0.000 min
Response: 3233823
Conc: 19.99 ug/ml




#12 Fluoranthene (C21.85)

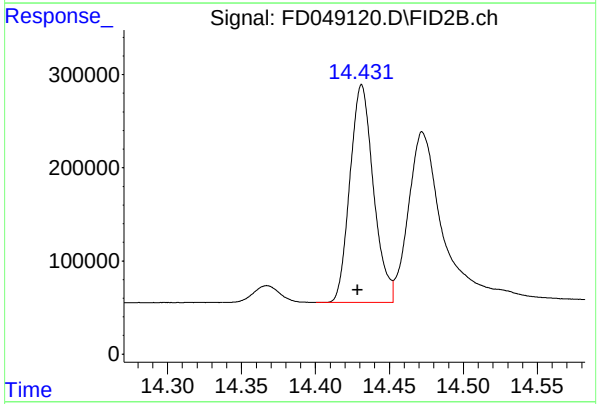
R.T.: 12.268 min
Delta R.T.: 0.001 min
Response: 3086798
Conc: 20.00 ug/ml




#13 Pyrene (C20.8)

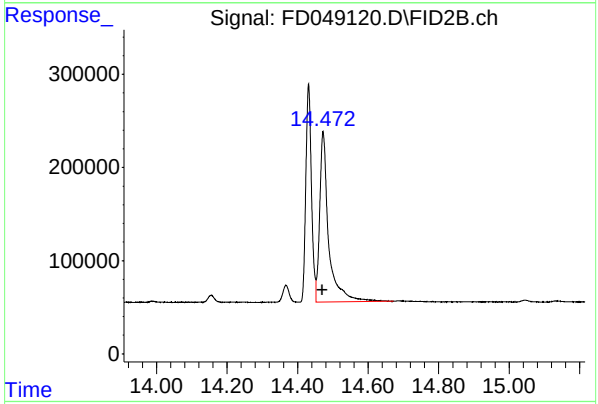
R.T.: 12.560 min
Delta R.T.: 0.002 min
Response: 3020840
Conc: 19.61 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD



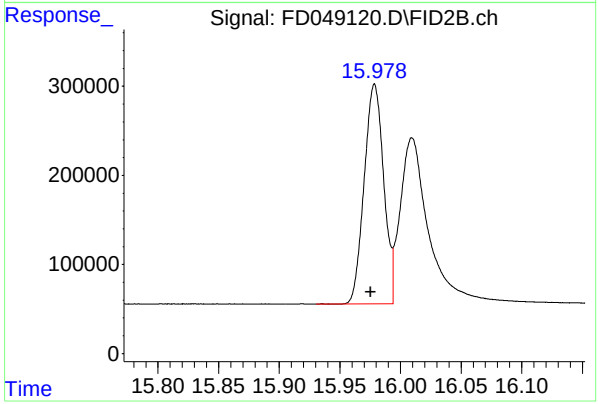

#14 Benzo[a]anthracene (C26.37)

R.T.: 14.431 min
Delta R.T.: 0.003 min
Response: 2581314
Conc: 19.65 ug/ml



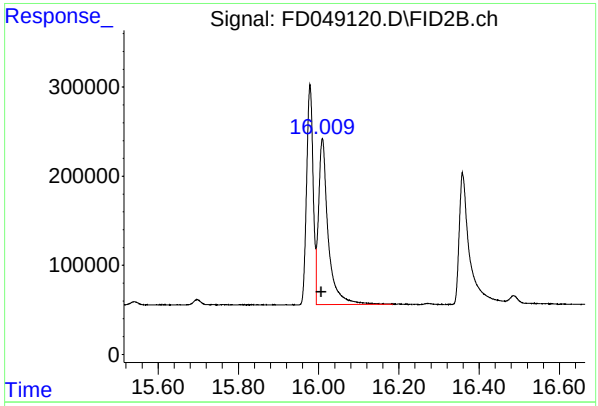

#15 Chrysene (C27.41)

R.T.: 14.472 min
Delta R.T.: 0.003 min
Response: 3225972
Conc: 19.95 ug/ml




#16 benzo[b]fluoranthene (C30.41)

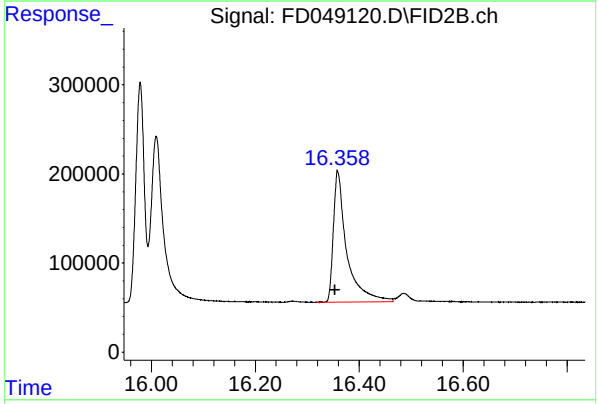
R.T.: 15.979 min
Delta R.T.: 0.003 min
Response: 2759362
Conc: 20.05 ug/ml




#17 Bnezo[k]fluoranthene (C30.14)

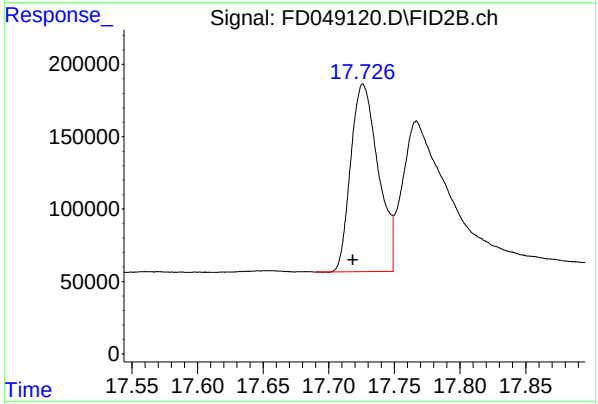
R.T.: 16.010 min
Delta R.T.: 0.003 min
Response: 3129958
Conc: 19.82 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD



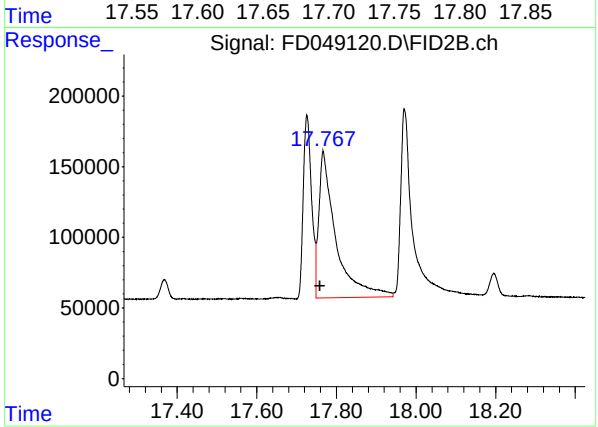

#18 Benzo[a]pyrene (C31.34)

R.T.: 16.359 min
Delta R.T.: 0.005 min
Response: 2619384
Conc: 19.30 ug/ml



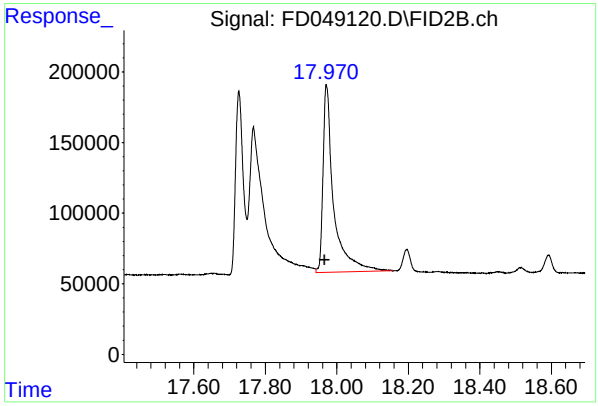

#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.726 min
Delta R.T.: 0.008 min
Response: 1884461
Conc: 17.24 ug/ml




#20 Dibenz[a,h]anthracene (C30.36)

R.T.: 17.767 min
Delta R.T.: 0.008 min
Response: 3072254
Conc: 19.80 ug/ml




#21 Benzo[g,h,i]perylene (C34.01)

R.T.: 17.971 min
Delta R.T.: 0.005 mi
Response: 2738520
Conc: 18.89 ug/m

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022725AR\
Data File : FD049120.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2025 13:27
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Title : GC Extractables

Signal : FID2B.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 4.176 | 4.130 | 4.322 | BB | 320719 | 3104083 | 95.08% | 5.147% |
| 2 | 5.694 | 5.644 | 5.897 | BB | 263134 | 3125342 | 95.73% | 5.182% |
| 3 | 6.741 | 6.706 | 6.942 | PB | 242867 | 3098648 | 94.92% | 5.138% |
| 4 | 7.353 | 7.302 | 7.499 | BB | 234464 | 2797961 | 85.71% | 4.639% |
| 5 | 8.004 | 7.960 | 8.120 | BB | 279538 | 3151413 | 96.53% | 5.225% |
| 6 | 8.205 | 8.160 | 8.275 | BV | 131242 | 1681726 | 51.51% | 2.788% |
| 7 | 8.297 | 8.275 | 8.422 | VB | 301403 | 3264584 | 100.00% | 5.413% |
| 8 | 9.078 | 8.965 | 9.259 | BB | 234793 | 3082178 | 94.41% | 5.110% |
| 9 | 10.465 | 10.365 | 10.520 | BV | 263674 | 3019229 | 92.48% | 5.006% |
| 10 | 10.543 | 10.520 | 10.760 | VB | 159325 | 2633827 | 80.68% | 4.367% |
| 11 | 11.234 | 11.130 | 11.339 | BB | 296346 | 3233823 | 99.06% | 5.362% |
| 12 | 12.268 | 12.234 | 12.429 | VB | 232788 | 3086798 | 94.55% | 5.118% |
| 13 | 12.560 | 12.532 | 12.657 | BV | 225235 | 3020840 | 92.53% | 5.009% |
| 14 | 14.431 | 14.400 | 14.452 | PV | 233816 | 2581314 | 79.07% | 4.280% |
| 15 | 14.472 | 14.452 | 14.670 | VV | 182986 | 3225972 | 98.82% | 5.349% |
| 16 | 15.979 | 15.930 | 15.994 | BV | 247136 | 2759362 | 84.52% | 4.575% |
| 17 | 16.010 | 15.994 | 16.185 | VB | 186419 | 3129958 | 95.88% | 5.190% |
| 18 | 16.359 | 16.317 | 16.465 | BV | 146825 | 2619384 | 80.24% | 4.343% |
| 19 | 17.726 | 17.690 | 17.749 | BV | 129741 | 1884461 | 57.72% | 3.125% |
| 20 | 17.767 | 17.749 | 17.942 | VV | 103742 | 3072254 | 94.11% | 5.094% |
| 21 | 17.971 | 17.942 | 18.157 | VV | 132863 | 2738520 | 83.89% | 4.541% |
| | | | Sum of corrected areas: | | | 60311677 | | |

Aromatic EPH 021125.M Fri Feb 28 02:00:05 2025

Evaluate Continuing Calibration Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022725AR\
Data File : FD049120.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2025 13:27
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

**Instrument :**
FID_D
**LabSampleId :**
20 PPM AROMATIC HC STD

Integration File: autoint1.e
Quant Time: Feb 28 01:27:00 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 1 | T | 1,2,3-Trimethylbenzene (C10 | 159.254 | 155.204 | E3 | 2.5 | 99 | 0.00 |
| 2 | T | Naphthalene (C11.7) | 158.788 | 156.267 | E3 | 1.6 | 100 | 0.00 |
| 3 | T | 2-Methylnaphthalene (C12.89 | 155.693 | 154.932 | E3 | 0.5 | 100 | 0.00 |
| 4 | S | 2-Bromonaphthalene (SURR) | 143.109 | 139.898 | E3 | 2.2 | 99 | 0.00 |
| 5 | T | Acenaphthylene (C15.06) | 162.606 | 157.571 | E3 | 3.1 | 99 | 0.00 |
| 6 | S | 2-Flurobiphenyl (SURR) | 87.912 | 84.086 | E3 | 4.4 | 94 | 0.00 |
| 7 | T | Acenaphthene (C15.5) | 164.509 | 163.229 | E3 | 0.8 | 102 | 0.00 |
| 8 | T | Flouorene (C16.55) | 157.649 | 154.109 | E3 | 2.2 | 99 | 0.00 |
| 9 | T | Phenanthrene (C19.36) | 150.701 | 150.961 | E3 | -0.2 | 101 | 0.00 |
| 10 | T | Anthracene (C19.43) | 151.028 | 131.691 | E3 | 12.8 | 88 | 0.00 |
| 11 | S | ortho-Terphenyl (SURR) | 161.774 | 161.691 | E3 | 0.1 | 102 | 0.00 |
| 12 | T | Fluoranthene (C21.85) | 154.315 | 154.340 | E3 | -0.0 | 101 | 0.00 |
| 13 | T | Pyrene (C20.8) | 154.058 | 151.042 | E3 | 2.0 | 100 | 0.00 |
| 14 | T | Benzo[a]anthracene (C26.37) | 131.390 | 129.066 | E3 | 1.8 | 95 | 0.00 |
| 15 | T | Chrysene (C27.41) | 161.687 | 161.299 | E3 | 0.2 | 104 | 0.00 |
| 16 | T | benzo[b]fluoranthene (C30.4 | 137.594 | 137.968 | E3 | -0.3 | 98 | 0.00 |
| 17 | T | Bnezo[k]fluoranthene (C30.1 | 157.942 | 156.498 | E3 | 0.9 | 103 | 0.00 |
| 18 | T | Benzo[a]pyrene (C31.34) | 135.737 | 130.969 | E3 | 3.5 | 98 | 0.00 |
| 19 | T | Indeno[1,2,3-cd]pyrene (C35 | 109.277 | 94.223 | E3 | 13.8 | 88 | 0.00 |
| 20 | T | Dibenz[a,h]anthracene (C30. | 155.140 | 153.613 | E3 | 1.0 | 99 | 0.00 |
| 21 | T | Benzo[g,h,i]perylene (C34.0 | 144.951 | 136.926 | E3 | 5.5 | 97 | 0.00 |

Evaluate Continuing Calibration Report - Not Founds

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(#) = Out of Range SPCC's out = 0 CCC's out = 0

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

# Continuing Calibration Report for SequenceID : FD022725AR

| Parameter | AreaCount | Conc. | RT_Min | RT_Max | Response Factor | AVGRF | %DEV |
|---|---|---|---|---|---|---|---|
| **File ID :** | **FD049126.D** | | | | | | |
| Aromatic C10-C12 | 6023865.000 | 40.000 | 4.076 | 5.794 | 150596.625 | 159020.606 | 5.297 |
| Aromatic C12-C16 | 9168678.000 | 60.000 | 5.795 | 8.397 | 152811.300 | 160935.866 | 5.048 |
| Aromatic C16-C21 | 11343539.000 | 80.000 | 8.398 | 12.661 | 141794.238 | 153359.309 | 7.541 |
| Aromatic C21-C36 | 24057363.000 | 180.000 | 12.662 | 18.071 | 133652.017 | 143114.753 | 6.612 |
| Aromatic EPH | 50593445.000 | 360.000 | 4.076 | 18.071 | 140537.347 | 150128.823 | 6.389 |

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

| | | | |
|---|---|---|---|
| Lab Sample ID: | 20 PPM AROMATIC HC S | Acq On: | 27 Feb 2025 17:45 |
| Client Sample ID: | | Operator: | YP/AJ |
| Data file: | FD049126.D | Misc: | |
| Instrument: | FID_D | ALS Vial: | 52 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | Units |
|---|---|---|---|---|---|
| Aromatic C10-C12 | 4.076 | 5.794 | 6023865.000 | 40.000 | ug/ml |
| Aromatic C12-C16 | 5.795 | 8.397 | 9168678.000 | 60.000 | ug/ml |
| Aromatic C16-C21 | 8.398 | 12.661 | 11343539.000 | 80.000 | ug/ml |
| Aromatic C21-C36 | 12.662 | 18.071 | 24057363.000 | 180.000 | ug/ml |
| Aromatic EPH | 4.076 | 18.071 | 50593445.000 | 360.000 | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022725AR\
Data File : FD049126.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2025 17:45
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 52 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD

**Manual Integrations APPROVED**
Reviewed By :Yogesh Patel 02/28/2025
Supervised By :Ankita Jodhani 02/28/2025

Integration File: autoint1.e
Quant Time: Feb 28 01:29:13 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

| | Compound | R.T. | Response | Conc Units |
|---|---|---|---|---|
| | **System Monitoring Compounds** | | | |
| 4) S | 2-Bromonaphthalene (S... | 7.353 | 2728919 | 19.069 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 38.14% |
| 6) S | 2-Flurobiphenyl (SURR) | 8.205 | 1647523 | 18.741 ug/ml |
| Spiked Amount | 50.000 Range | 0 - 131 | Recovery = | 37.48% |
| 11) S | ortho-Terphenyl (SURR) | 11.234 | 3139487 | 19.407 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 38.81% |
| | **Target Compounds** | | | |
| 1) T | 1,2,3-Trimethylbenzen... | 4.176 | 2992353 | 18.790 ug/ml |
| 2) T | Naphthalene (C11.7) | 5.694 | 3031512 | 19.092 ug/ml |
| 3) T | 2-Methylnaphthalene (... | 6.740 | 3015137 | 19.366 ug/ml |
| 5) T | Acenaphthylene (C15.06) | 8.004 | 3001239 | 18.457 ug/ml |
| 7) T | Acenaphthene (C15.5) | 8.297 | 3152302 | 19.162 ug/ml |
| 8) T | Flouorene (C16.55) | 9.078 | 2966953 | 18.820 ug/ml |
| 9) T | Phenanthrene (C19.36) | 10.465 | 2891028 | 19.184 ug/ml |
| 10) T | Anthracene (C19.43) | 10.543 | 2491145 | 16.495 ug/mlm |
| 12) T | Fluoranthene (C21.85) | 12.268 | 2989893 | 19.375 ug/ml |
| 13) T | Pyrene (C20.8) | 12.561 | 2994413 | 19.437 ug/ml |
| 14) T | Benzo[a]anthracene (C... | 14.431 | 2485881 | 18.920 ug/ml |
| 15) T | Chrysene (C27.41) | 14.472 | 2805670 | 17.353 ug/ml |
| 16) T | benzo[b]fluoranthene ... | 15.978 | 2629919 | 19.114 ug/ml |
| 17) T | Bnezo[k]fluoranthene ... | 16.011 | 3133545 | 19.840 ug/ml |
| 18) T | Benzo[a]pyrene (C31.34) | 16.361 | 2394319 | 17.639 ug/ml |
| 19) T | Indeno[1,2,3-cd]pyren... | 17.726 | 1822082 | 16.674 ug/ml |
| 20) T | Dibenz[a,h]anthracene... | 17.767 | 3259244 | 21.008 ug/ml |
| 21) T | Benzo[g,h,i]perylene ... | 17.972 | 2536810 | 17.501 ug/ml |

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

Quantitation Report (QT Reviewed)

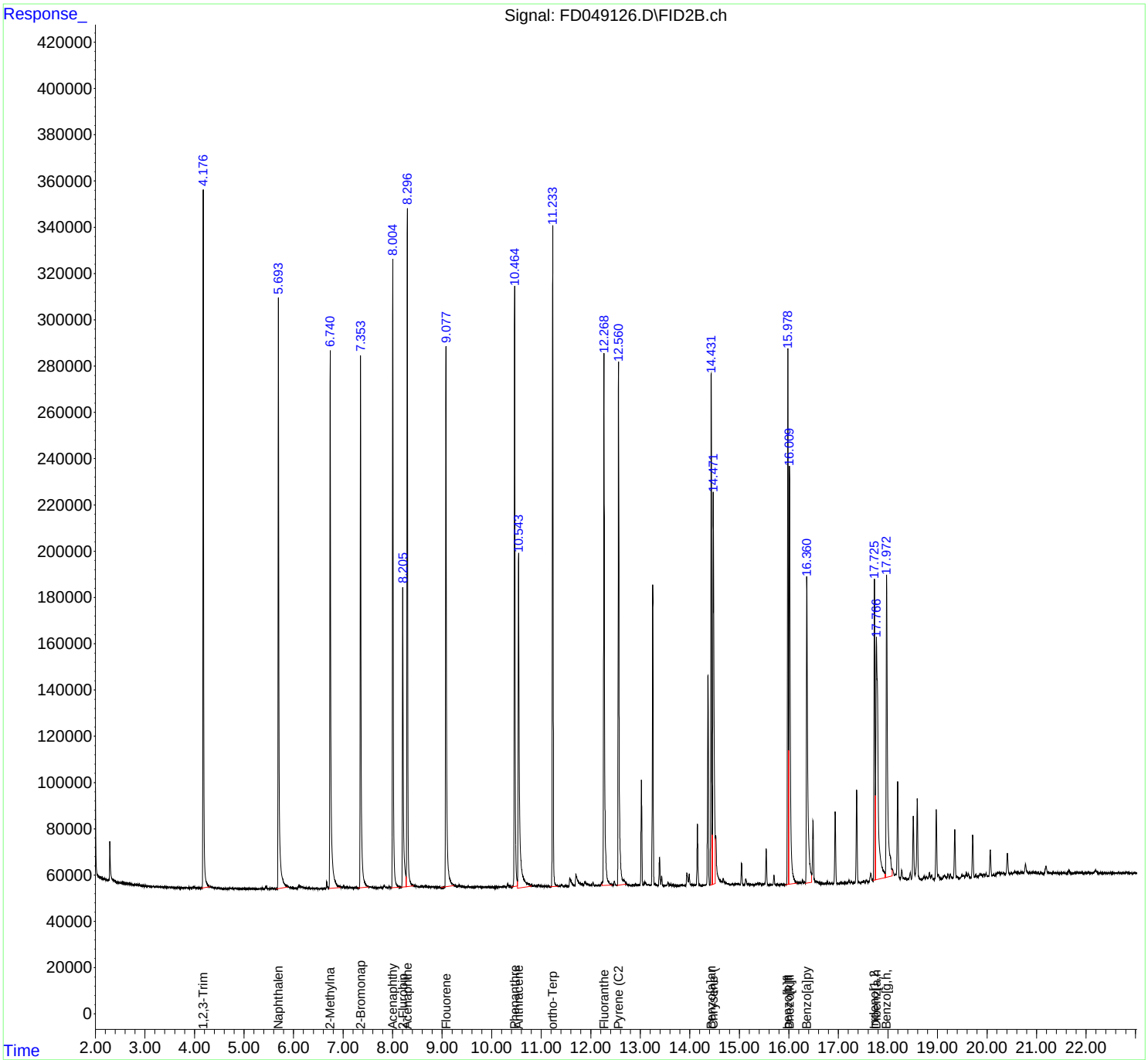
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022725AR\
Data File : FD049126.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2025 17:45
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 52 Sample Multiplier: 1

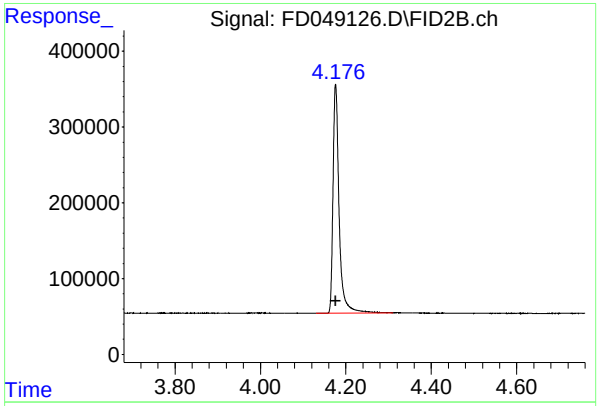
Integration File: autoint1.e
Quant Time: Feb 28 01:29:13 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD

**Manual Integrations APPROVED**
Reviewed By :Yogesh Patel 02/28/2025
Supervised By :Ankita Jodhani 02/28/2025





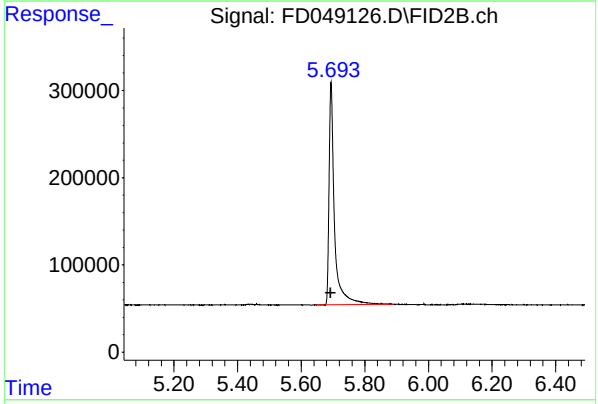

#1 1,2,3-Trimethylbenzene (C10.1)

R.T.: 4.176 min
Delta R.T.: 0.000 min
Response: 2992353
Conc: 18.79 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD

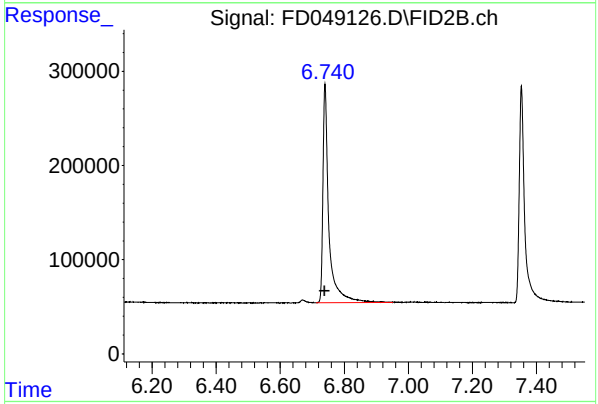
**Manual Integrations APPROVED**

Reviewed By :Yogesh Patel 02/28/2025
Supervised By :Ankita Jodhani 02/28/2025



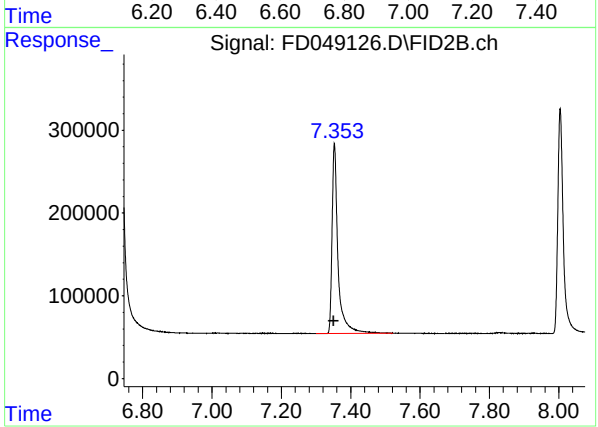

#2 Naphthalene (C11.7)

R.T.: 5.694 min
Delta R.T.: 0.001 min
Response: 3031512
Conc: 19.09 ug/ml



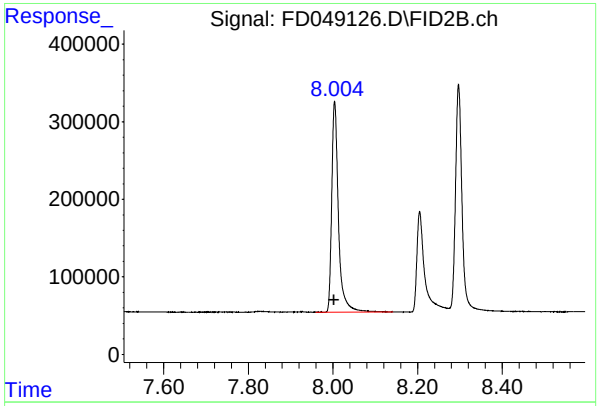

#3 2-Methylnaphthalene (C12.89)

R.T.: 6.740 min
Delta R.T.: 0.001 min
Response: 3015137
Conc: 19.37 ug/ml




#4 2-Bromonaphthalene (SURR)

R.T.: 7.353 min
Delta R.T.: 0.002 min
Response: 2728919
Conc: 19.07 ug/ml



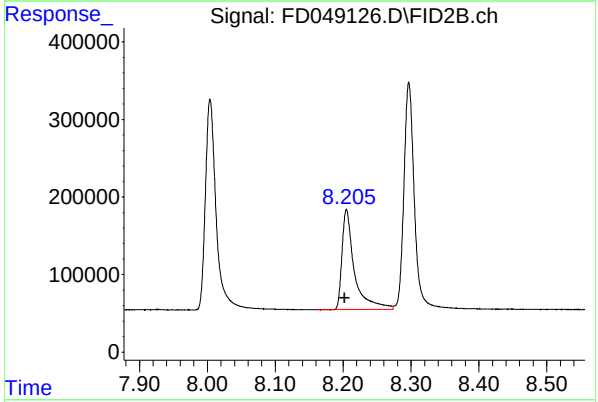

#5 Acenaphthylene (C15.06)

R.T.: 8.004 min
Delta R.T.: 0.001 min
Response: 3001239
Conc: 18.46 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD

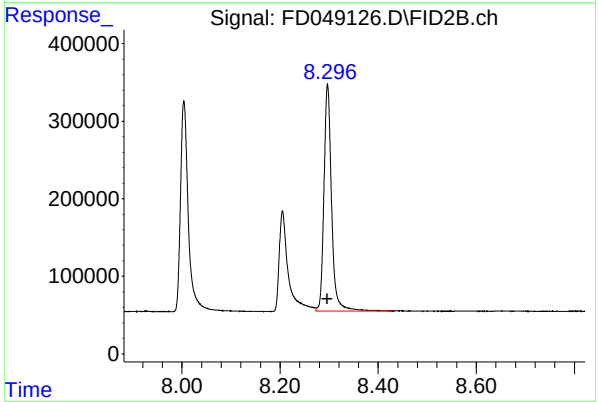
**Manual Integrations**
**APPROVED**

Reviewed By :Yogesh Patel 02/28/2025
Supervised By :Ankita Jodhani 02/28/2025



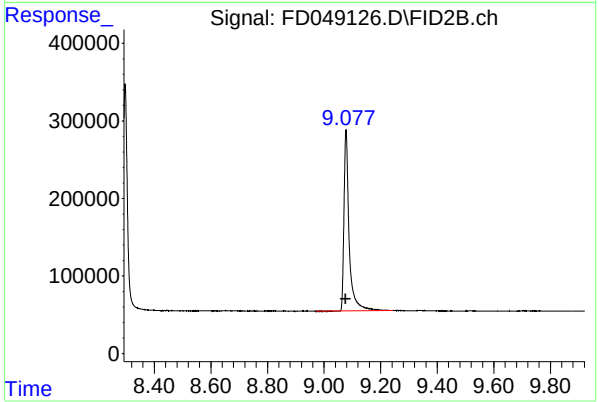

#6 2-Flurobiphenyl (SURR)

R.T.: 8.205 min
Delta R.T.: 0.003 min
Response: 1647523
Conc: 18.74 ug/ml



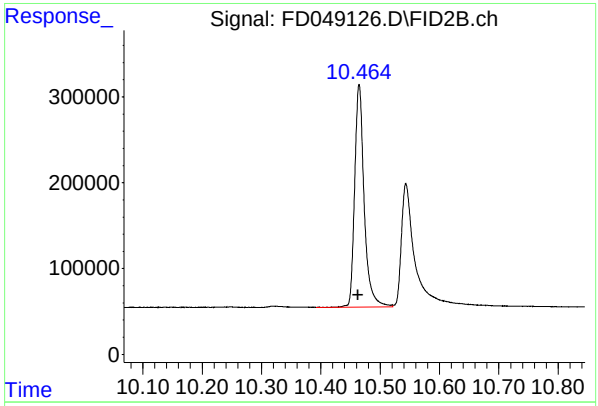

#7 Acenaphthene (C15.5)

R.T.: 8.297 min
Delta R.T.: 0.000 min
Response: 3152302
Conc: 19.16 ug/ml




#8 Flouorene (C16.55)

R.T.: 9.078 min
Delta R.T.: 0.002 min
Response: 2966953
Conc: 18.82 ug/ml



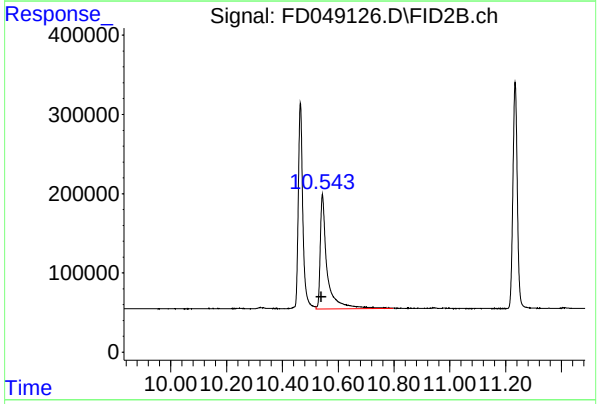

#9 Phenanthrene (C19.36)

R.T.: 10.465 min
Delta R.T.: 0.002 min
Response: 2891028
Conc: 19.18 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD

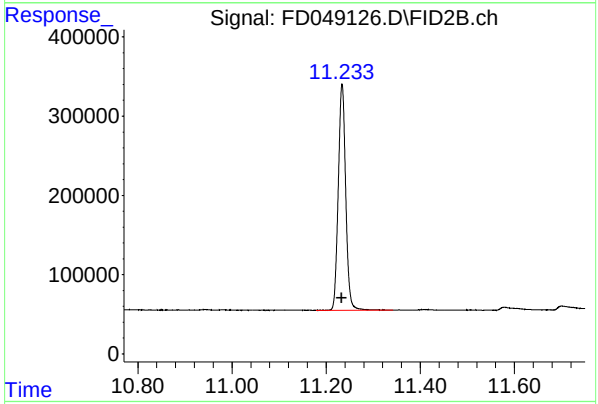
**Manual Integrations APPROVED**

Reviewed By :Yogesh Patel 02/28/2025
Supervised By :Ankita Jodhani 02/28/2025



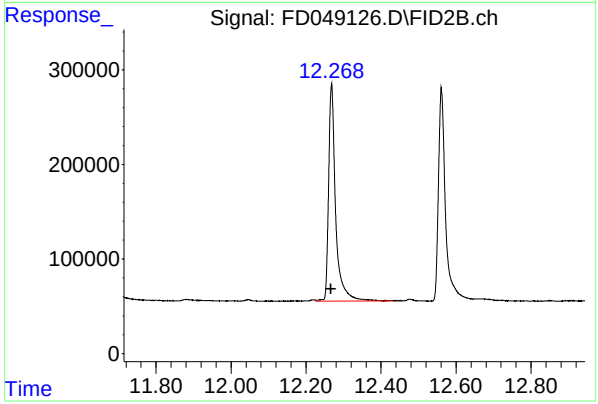

#10 Anthracene (C19.43)

R.T.: 10.543 min
Delta R.T.: 0.003 min
Response: 2491145
Conc: 16.49 ug/ml m



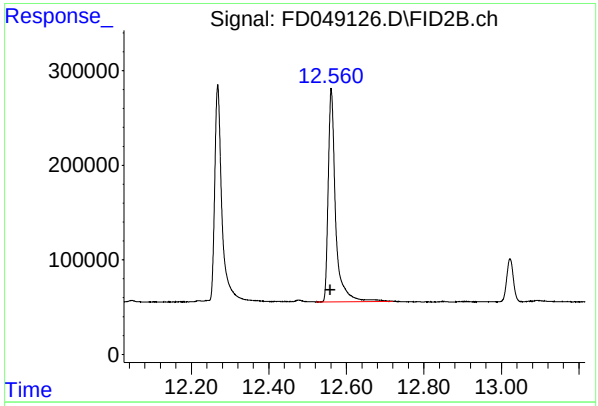

#11 ortho-Terphenyl (SURR)

R.T.: 11.234 min
Delta R.T.: 0.000 min
Response: 3139487
Conc: 19.41 ug/ml




#12 Fluoranthene (C21.85)

R.T.: 12.268 min
Delta R.T.: 0.001 min
Response: 2989893
Conc: 19.38 ug/ml



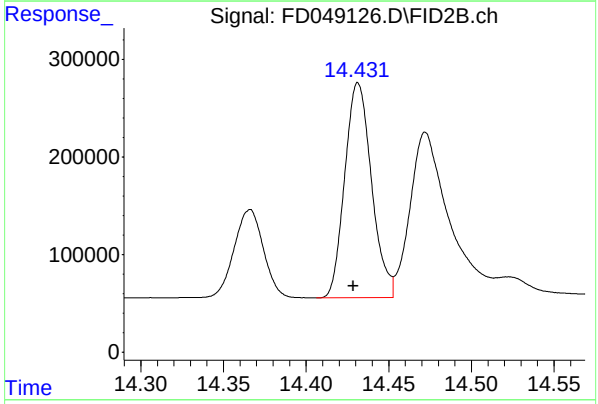

#13 Pyrene (C20.8)

R.T.: 12.561 min
Delta R.T.: 0.003 min
Response: 2994413
Conc: 19.44 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD

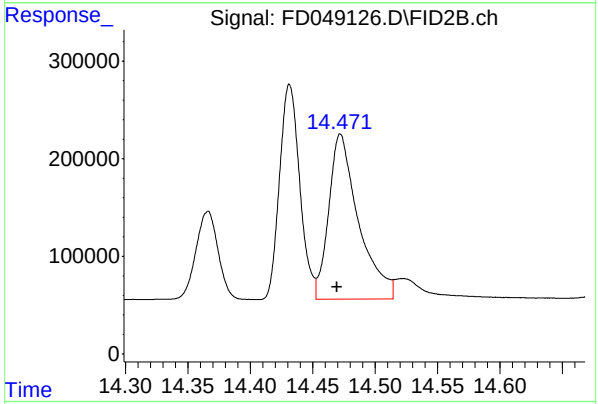
**Manual Integrations**
**APPROVED**

Reviewed By :Yogesh Patel 02/28/2025
Supervised By :Ankita Jodhani 02/28/2025



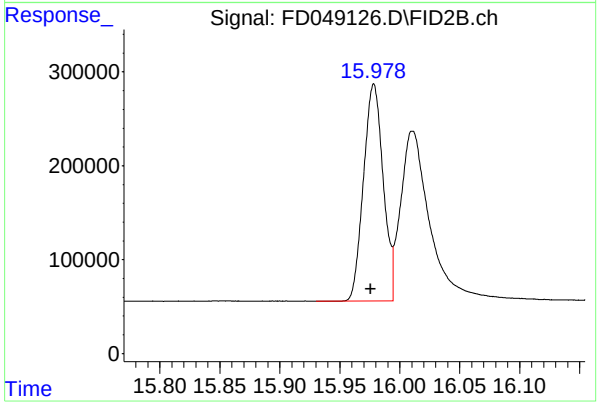

#14 Benzo[a]anthracene (C26.37)

R.T.: 14.431 min
Delta R.T.: 0.003 min
Response: 2485881
Conc: 18.92 ug/ml



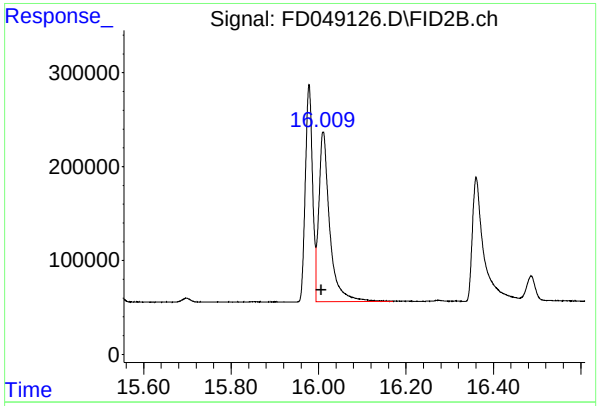

#15 Chrysene (C27.41)

R.T.: 14.472 min
Delta R.T.: 0.003 min
Response: 2805670
Conc: 17.35 ug/ml




#16 benzo[b]fluoranthene (C30.41)

R.T.: 15.978 min
Delta R.T.: 0.003 min
Response: 2629919
Conc: 19.11 ug/ml



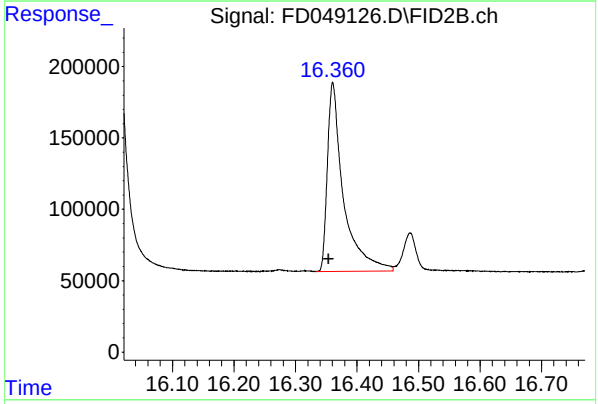

#17 Bnezo[k]fluoranthene (C30.14)

R.T.: 16.011 min
Delta R.T.: 0.005 min
Response: 3133545
Conc: 19.84 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD

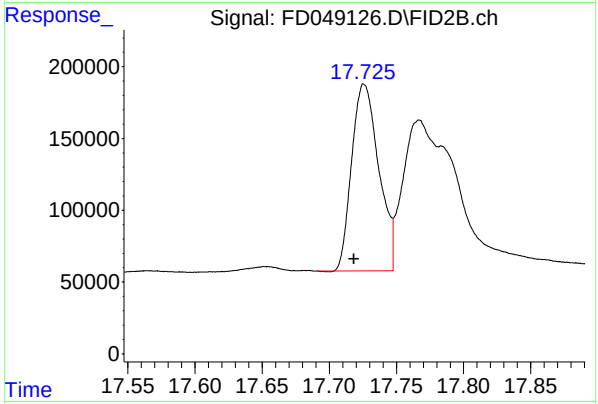
**Manual Integrations APPROVED**

Reviewed By :Yogesh Patel 02/28/2025
Supervised By :Ankita Jodhani 02/28/2025



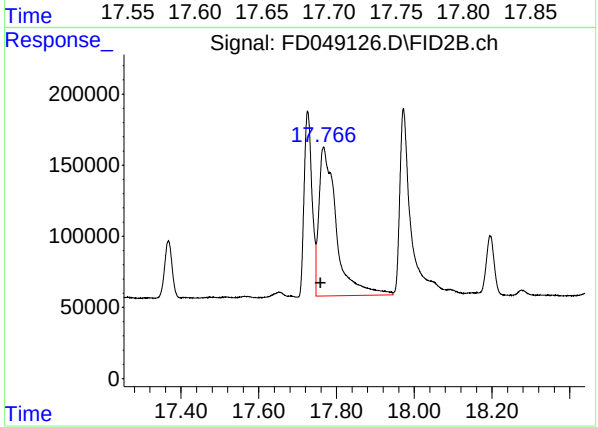

#18 Benzo[a]pyrene (C31.34)

R.T.: 16.361 min
Delta R.T.: 0.007 min
Response: 2394319
Conc: 17.64 ug/ml



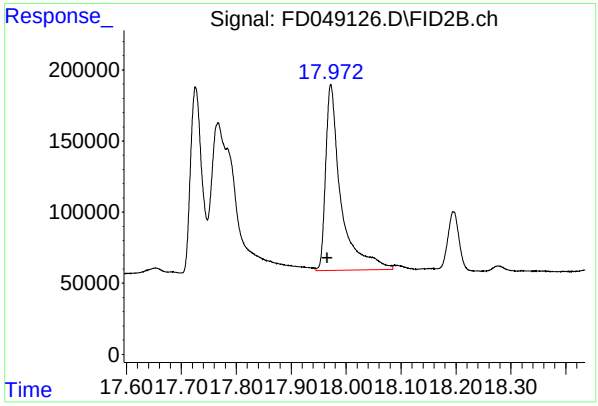

#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.726 min
Delta R.T.: 0.008 min
Response: 1822082
Conc: 16.67 ug/ml




#20 Dibenz[a,h]anthracene (C30.36)

R.T.: 17.767 min
Delta R.T.: 0.008 min
Response: 3259244
Conc: 21.01 ug/ml




#21 Benzo[g,h,i]perylene (C34.01)

R.T.: 17.972 min
Delta R.T.: 0.006 mi
Response: 2536810
Conc: 17.50 ug/m

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD

**Manual Integrations**
**APPROVED**

Reviewed By :Yogesh Patel 02/28/2025
Supervised By :Ankita Jodhani 02/28/2025

rteres

**Instrument :**
FID_D
**LabSampleId :**
20 PPM AROMATIC HC STD

Area Percent Report

**Manual IntegrationsAPPROVED**

Reviewed By :Yogesh Patel 02/28/2025
Supervised By :Ankita Jodhani 02/28/2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD02272
Data File : FD049126.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2025 17:45
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Title : GC Extractables

Signal : FID2B.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 4.176 | 4.130 | 4.310 | BB | 301054 | 2992353 | 91.81% | 5.162% |
| 2 | 5.694 | 5.647 | 5.889 | BB | 255160 | 3031512 | 93.01% | 5.230% |
| 3 | 6.740 | 6.712 | 6.952 | BB | 231925 | 3015137 | 92.51% | 5.201% |
| 4 | 7.353 | 7.300 | 7.522 | BB | 229183 | 2728919 | 83.73% | 4.708% |
| 5 | 8.004 | 7.960 | 8.142 | BB | 271487 | 3001239 | 92.08% | 5.178% |
| 6 | 8.205 | 8.160 | 8.273 | BV | 129428 | 1647523 | 50.55% | 2.842% |
| 7 | 8.297 | 8.273 | 8.430 | VB | 292737 | 3152302 | 96.72% | 5.438% |
| 8 | 9.078 | 8.972 | 9.244 | BB | 234088 | 2966953 | 91.03% | 5.118% |
| 9 | 10.465 | 10.392 | 10.521 | BV | 259262 | 2891028 | 88.70% | 4.987% |
| 10 | 10.544 | 10.521 | 10.749 | VB | 143592 | 2348592 | 72.06% | 4.052% |
| 11 | 11.234 | 11.179 | 11.342 | BB | 285835 | 3139487 | 96.33% | 5.416% |
| 12 | 12.268 | 12.227 | 12.432 | VB | 229937 | 2989893 | 91.74% | 5.158% |
| 13 | 12.561 | 12.522 | 12.720 | BB | 225927 | 2994413 | 91.87% | 5.166% |
| 14 | 14.431 | 14.406 | 14.453 | PV | 220219 | 2485881 | 76.27% | 4.288% |
| 15 | 14.472 | 14.453 | 14.514 | VV | 169580 | 2805670 | 86.08% | 4.840% |
| 16 | 15.978 | 15.930 | 15.994 | BV | 231522 | 2629919 | 80.69% | 4.537% |
| 17 | 16.011 | 15.994 | 16.170 | VB | 181011 | 3133545 | 96.14% | 5.406% |
| 18 | 16.361 | 16.334 | 16.459 | BV | 132427 | 2394319 | 73.46% | 4.130% |
| 19 | 17.726 | 17.690 | 17.747 | BV | 130388 | 1822082 | 55.91% | 3.143% |
| 20 | 17.767 | 17.747 | 17.945 | VV | 104832 | 3259244 | 100.00% | 5.623% |
| 21 | 17.972 | 17.945 | 18.085 | VV | 130622 | 2536810 | 77.83% | 4.376% |
| | | | Sum of corrected areas: | | | 57966821 | | |

Aromatic EPH 021125.M Fri Feb 28 02:06:13 2025

Evaluate Continuing Calibration Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022725AR\
Data File : FD049126.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2025 17:45
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 52 Sample Multiplier: 1

**Instrument :**
FID_D
**LabSampleId :**
20 PPM AROMATIC HC STD

Integration File: autoint1.e
Quant Time: Feb 28 01:29:13 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 1 | T | 1,2,3-Trimethylbenzene (C10 | 159.254 | 149.618 | E3 | 6.1 | 96 | 0.00 |
| 2 | T | Naphthalene (C11.7) | 158.788 | 151.576 | E3 | 4.5 | 97 | 0.00 |
| 3 | T | 2-Methylnaphthalene (C12.89 | 155.693 | 150.757 | E3 | 3.2 | 97 | 0.00 |
| 4 | S | 2-Bromonaphthalene (SURR) | 143.109 | 136.446 | E3 | 4.7 | 96 | 0.00 |
| 5 | T | Acenaphthylene (C15.06) | 162.606 | 150.062 | E3 | 7.7 | 94 | 0.00 |
| 6 | S | 2-Flurobiphenyl (SURR) | 87.912 | 82.376 | E3 | 6.3 | 93 | 0.00 |
| 7 | T | Acenaphthene (C15.5) | 164.509 | 157.615 | E3 | 4.2 | 98 | 0.00 |
| 8 | T | Flouorene (C16.55) | 157.649 | 148.348 | E3 | 5.9 | 95 | 0.00 |
| 9 | T | Phenanthrene (C19.36) | 150.701 | 144.551 | E3 | 4.1 | 97 | 0.00 |
| 10 | T | Anthracene (C19.43) | 151.028 | 124.557 | E3 | 17.5 | 83 | 0.00 |
| 11 | S | ortho-Terphenyl (SURR) | 161.774 | 156.974 | E3 | 3.0 | 99 | 0.00 |
| 12 | T | Fluoranthene (C21.85) | 154.315 | 149.495 | E3 | 3.1 | 97 | 0.00 |
| 13 | T | Pyrene (C20.8) | 154.058 | 149.721 | E3 | 2.8 | 99 | 0.00 |
| 14 | T | Benzo[a]anthracene (C26.37) | 131.390 | 124.294 | E3 | 5.4 | 92 | 0.00 |
| 15 | T | Chrysene (C27.41) | 161.687 | 140.283 | E3 | 13.2 | 90 | 0.00 |
| 16 | T | benzo[b]fluoranthene (C30.4 | 137.594 | 131.496 | E3 | 4.4 | 94 | 0.00 |
| 17 | T | Bnezo[k]fluoranthene (C30.1 | 157.942 | 156.677 | E3 | 0.8 | 103 | 0.00 |
| 18 | T | Benzo[a]pyrene (C31.34) | 135.737 | 119.716 | E3 | 11.8 | 89 | 0.00 |
| 19 | T | Indeno[1,2,3-cd]pyrene (C35 | 109.277 | 91.104 | E3 | 16.6 | 85 | 0.00 |
| 20 | T | Dibenz[a,h]anthracene (C30. | 155.140 | 162.962 | E3 | -5.0 | 105 | 0.00 |
| 21 | T | Benzo[g,h,i]perylene (C34.0 | 144.951 | 126.841 | E3 | 12.5 | 90 | 0.00 |

Evaluate Continuing Calibration Report - Not Founds

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(#) = Out of Range SPCC's out = 0 CCC's out = 0

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

# Continuing Calibration Report for SequenceID : FD022825AR

| Parameter | AreaCount | Conc. | RT_Min | RT_Max | Response Factor | AVGRF | %DEV |
|---|---|---|---|---|---|---|---|
| **File ID :** | **FD049129.D** | | | | | | |
| Aromatic C10-C12 | 6160252.000 | 40.000 | 4.076 | 5.794 | 154006.300 | 159020.606 | 3.153 |
| Aromatic C12-C16 | 9402232.000 | 60.000 | 5.795 | 8.396 | 156703.867 | 160935.866 | 2.630 |
| Aromatic C16-C21 | 11641914.000 | 80.000 | 8.397 | 12.661 | 145523.925 | 153359.309 | 5.109 |
| Aromatic C21-C36 | 23657575.000 | 180.000 | 12.662 | 18.073 | 131430.972 | 143114.753 | 8.164 |
| Aromatic EPH | 50861973.000 | 360.000 | 4.076 | 18.073 | 141283.258 | 150128.823 | 5.892 |

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

| | | | |
|---|---|---|---|
| Lab Sample ID: | 20 PPM AROMATIC HC S | Acq On: | 28 Feb 2025 10:23 |
| Client Sample ID: | | Operator: | YP/AJ |
| Data file: | FD049129.D | Misc: | |
| Instrument: | FID_D | ALS Vial: | 52 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | Units |
|---|---|---|---|---|---|
| Aromatic C10-C12 | 4.076 | 5.794 | 6160252.000 | 40.000 | ug/ml |
| Aromatic C12-C16 | 5.795 | 8.396 | 9402232.000 | 60.000 | ug/ml |
| Aromatic C16-C21 | 8.397 | 12.661 | 11641914.000 | 80.000 | ug/ml |
| Aromatic C21-C36 | 12.662 | 18.073 | 23657575.000 | 180.000 | ug/ml |
| Aromatic EPH | 4.076 | 18.073 | 50861973.000 | 360.000 | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022825AR\
Data File : FD049129.D
Signal(s) : FID2B.ch
Acq On : 28 Feb 2025 10:23
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 52 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD

**Manual Integrations APPROVED**
Reviewed By :Yogesh Patel 03/03/2025
Supervised By :Ankita Jodhani 03/04/2025

Integration File: autoint1.e
Quant Time: Mar 01 02:16:15 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

| | Compound | R.T. | Response | Conc Units |
|---|---|---|---|---|
| | **System Monitoring Compounds** | | | |
| 4) | S 2-Bromonaphthalene (S... | 7.353 | 2766220 | 19.329 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 38.66% |
| 6) | S 2-Flurobiphenyl (SURR) | 8.205 | 1579167 | 17.963 ug/ml |
| Spiked Amount | 50.000 Range | 0 - 131 | Recovery = | 35.93% |
| 11) | S ortho-Terphenyl (SURR) | 11.233 | 3098268 | 19.152 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 38.30% |
| | **Target Compounds** | | | |
| 1) | T 1,2,3-Trimethylbenzen... | 4.176 | 3087214 | 19.386 ug/ml |
| 2) | T Naphthalene (C11.7) | 5.694 | 3073038 | 19.353 ug/ml |
| 3) | T 2-Methylnaphthalene (... | 6.740 | 3030795 | 19.466 ug/ml |
| 5) | T Acenaphthylene (C15.06) | 8.004 | 3126284 | 19.226 ug/ml |
| 7) | T Acenaphthene (C15.5) | 8.296 | 3245153 | 19.726 ug/ml |
| 8) | T Flouorene (C16.55) | 9.078 | 3004154 | 19.056 ug/ml |
| 9) | T Phenanthrene (C19.36) | 10.464 | 2861190 | 18.986 ug/ml |
| 10) | T Anthracene (C19.43) | 10.542 | 2864021 | 18.963 ug/ml |
| 12) | T Fluoranthene (C21.85) | 12.269 | 2912936 | 18.877 ug/ml |
| 13) | T Pyrene (C20.8) | 12.561 | 2912549 | 18.905 ug/ml |
| 14) | T Benzo[a]anthracene (C... | 14.431 | 2400791 | 18.272 ug/ml |
| 15) | T Chrysene (C27.41) | 14.472 | 3110275 | 19.236 ug/ml |
| 16) | T benzo[b]fluoranthene ... | 15.978 | 2577213 | 18.731 ug/ml |
| 17) | T Bnezo[k]fluoranthene ... | 16.010 | 3069763 | 19.436 ug/ml |
| 18) | T Benzo[a]pyrene (C31.34) | 16.362 | 2597623 | 19.137 ug/ml |
| 19) | T Indeno[1,2,3-cd]pyren... | 17.729 | 1756887 | 16.077 ug/mlm |
| 20) | T Dibenz[a,h]anthracene... | 17.776 | 2586904 | 16.675 ug/ml |
| 21) | T Benzo[g,h,i]perylene ... | 17.973 | 2645183 | 18.249 ug/ml |

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

Quantitation Report (QT Reviewed)

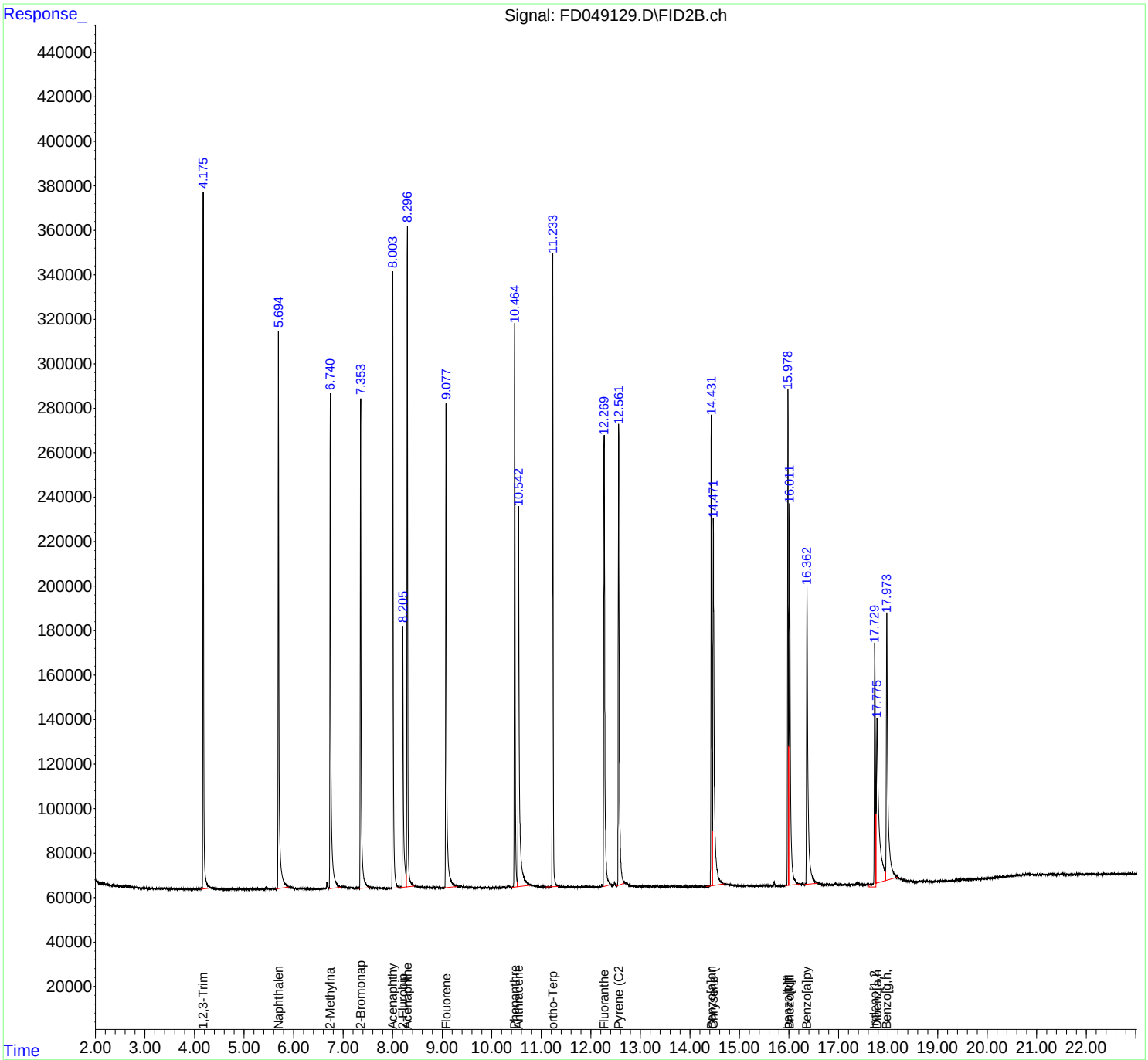
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022825AR\
Data File : FD049129.D
Signal(s) : FID2B.ch
Acq On : 28 Feb 2025 10:23
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 52 Sample Multiplier: 1

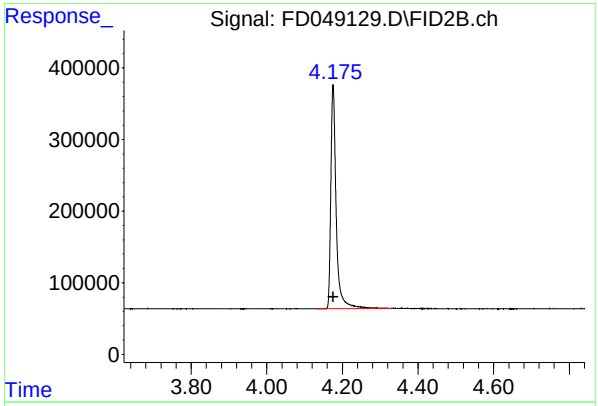
Integration File: autoint1.e
Quant Time: Mar 01 02:16:15 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD

**Manual Integrations APPROVED**
Reviewed By :Yogesh Patel 03/03/2025
Supervised By :Ankita Jodhani 03/04/2025





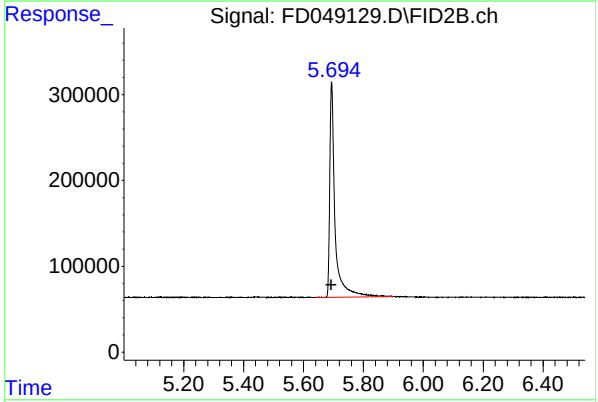

#1 1,2,3-Trimethylbenzene (C10.1)

R.T.: 4.176 min
Delta R.T.: 0.000 min
Response: 3087214
Conc: 19.39 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD

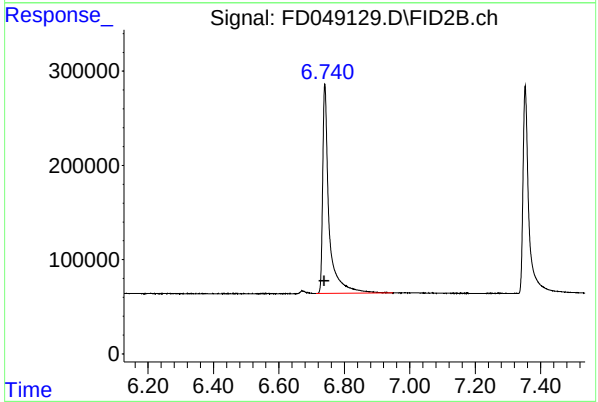
**Manual Integrations**
**APPROVED**

Reviewed By :Yogesh Patel 03/03/2025
Supervised By :Ankita Jodhani 03/04/2025



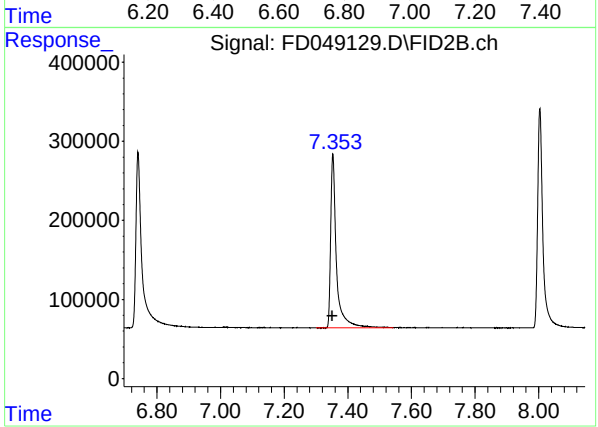

#2 Naphthalene (C11.7)

R.T.: 5.694 min
Delta R.T.: 0.001 min
Response: 3073038
Conc: 19.35 ug/ml



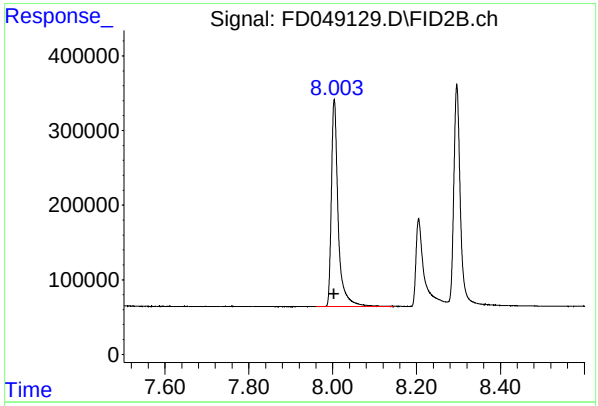

#3 2-Methylnaphthalene (C12.89)

R.T.: 6.740 min
Delta R.T.: 0.002 min
Response: 3030795
Conc: 19.47 ug/ml




#4 2-Bromonaphthalene (SURR)

R.T.: 7.353 min
Delta R.T.: 0.002 min
Response: 2766220
Conc: 19.33 ug/ml



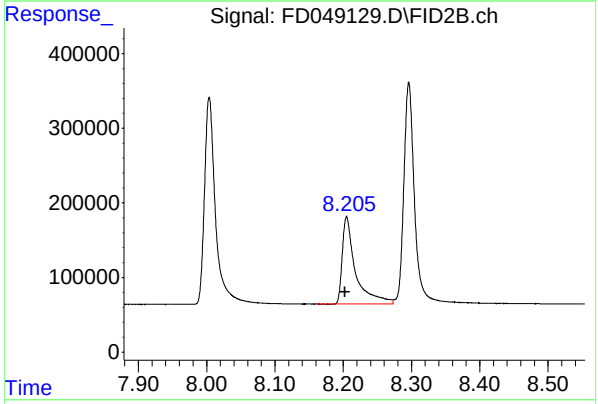

#5 Acenaphthylene (C15.06)

R.T.: 8.004 min
Delta R.T.: 0.001 min
Response: 3126284
Conc: 19.23 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD

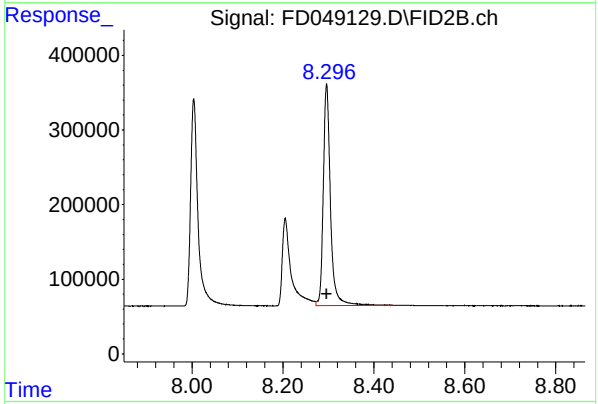
**Manual Integrations**
**APPROVED**

Reviewed By :Yogesh Patel 03/03/2025
Supervised By :Ankita Jodhani 03/04/2025



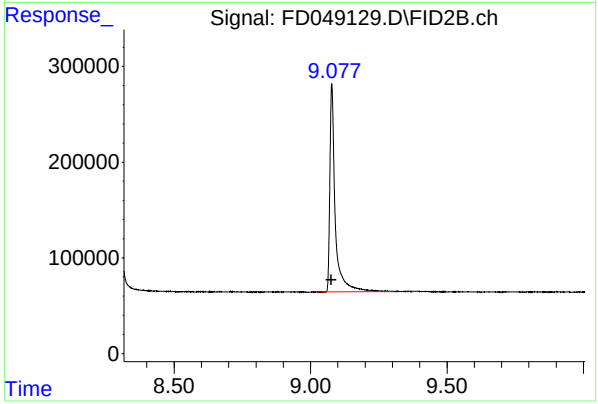

#6 2-Flurobiphenyl (SURR)

R.T.: 8.205 min
Delta R.T.: 0.003 min
Response: 1579167
Conc: 17.96 ug/ml



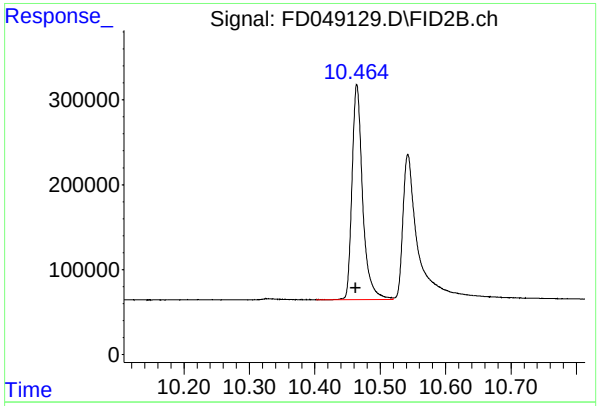

#7 Acenaphthene (C15.5)

R.T.: 8.296 min
Delta R.T.: 0.000 min
Response: 3245153
Conc: 19.73 ug/ml




#8 Flouorene (C16.55)

R.T.: 9.078 min
Delta R.T.: 0.002 min
Response: 3004154
Conc: 19.06 ug/ml



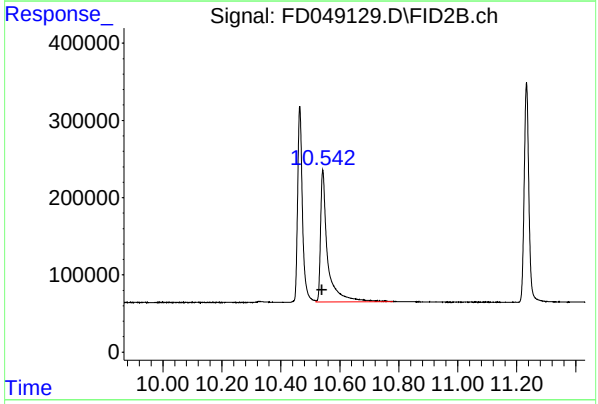

#9 Phenanthrene (C19.36)

R.T.: 10.464 min
Delta R.T.: 0.002 min
Response: 2861190
Conc: 18.99 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD

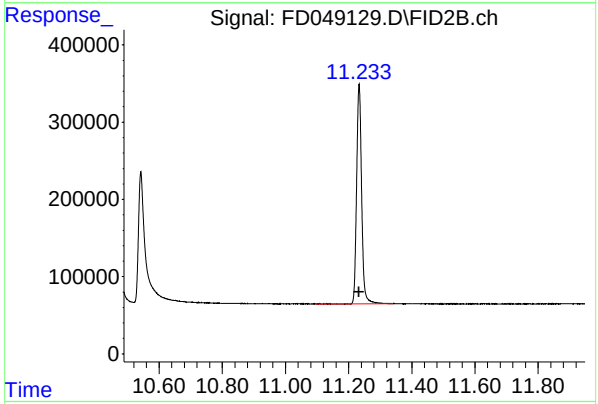
**Manual Integrations**
**APPROVED**

Reviewed By :Yogesh Patel 03/03/2025
Supervised By :Ankita Jodhani 03/04/2025



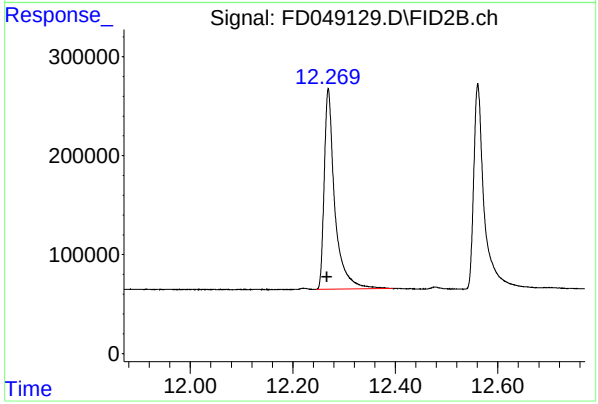

#10 Anthracene (C19.43)

R.T.: 10.542 min
Delta R.T.: 0.003 min
Response: 2864021
Conc: 18.96 ug/ml



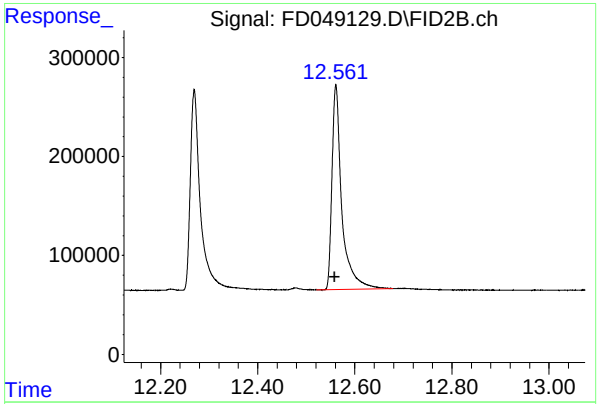

#11 ortho-Terphenyl (SURR)

R.T.: 11.233 min
Delta R.T.: 0.000 min
Response: 3098268
Conc: 19.15 ug/ml




#12 Fluoranthene (C21.85)

R.T.: 12.269 min
Delta R.T.: 0.002 min
Response: 2912936
Conc: 18.88 ug/ml



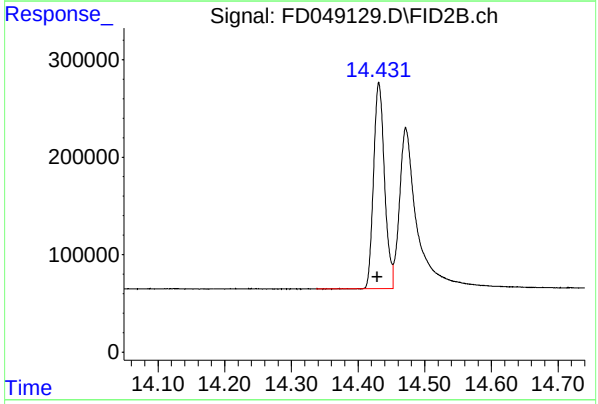

#13 Pyrene (C20.8)

R.T.: 12.561 min
Delta R.T.: 0.003 min
Response: 2912549
Conc: 18.91 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD

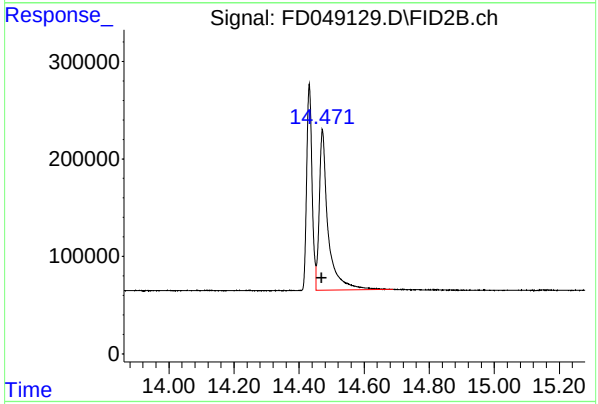
**Manual Integrations**
**APPROVED**

Reviewed By :Yogesh Patel 03/03/2025
Supervised By :Ankita Jodhani 03/04/2025



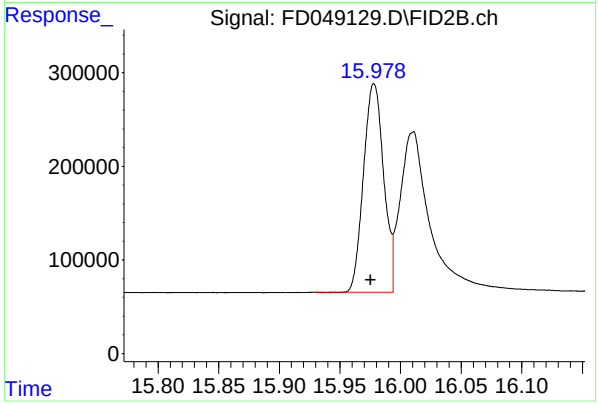

#14 Benzo[a]anthracene (C26.37)

R.T.: 14.431 min
Delta R.T.: 0.003 min
Response: 2400791
Conc: 18.27 ug/ml



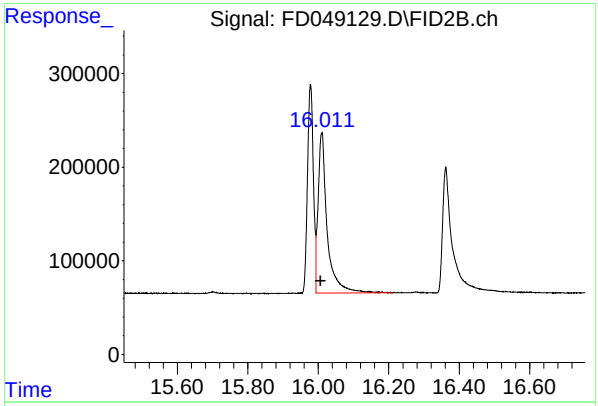

#15 Chrysene (C27.41)

R.T.: 14.472 min
Delta R.T.: 0.002 min
Response: 3110275
Conc: 19.24 ug/ml




#16 benzo[b]fluoranthene (C30.41)

R.T.: 15.978 min
Delta R.T.: 0.003 min
Response: 2577213
Conc: 18.73 ug/ml



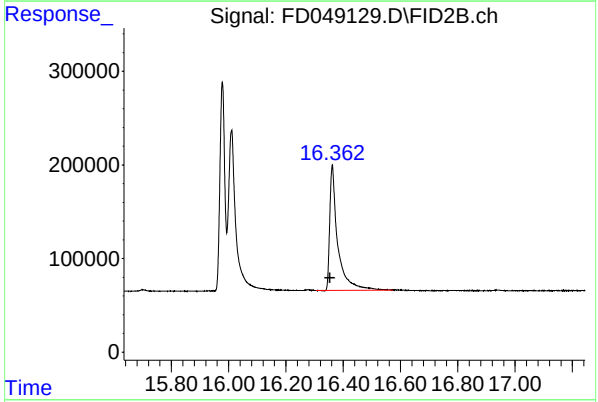

#17 Bnezo[k]fluoranthene (C30.14)

R.T.: 16.010 min
Delta R.T.: 0.004 min
Response: 3069763
Conc: 19.44 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD

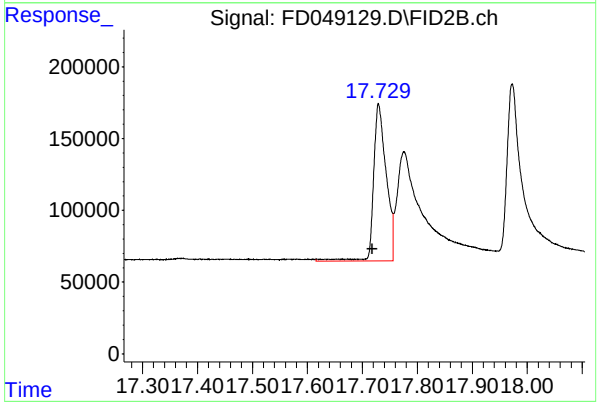
**Manual Integrations APPROVED**

Reviewed By :Yogesh Patel 03/03/2025
Supervised By :Ankita Jodhani 03/04/2025



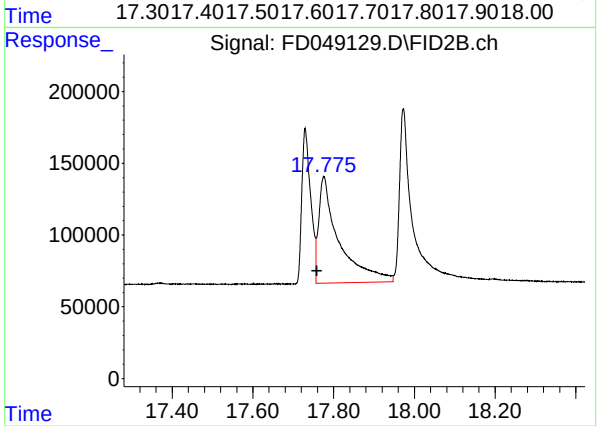

#18 Benzo[a]pyrene (C31.34)

R.T.: 16.362 min
Delta R.T.: 0.008 min
Response: 2597623
Conc: 19.14 ug/ml



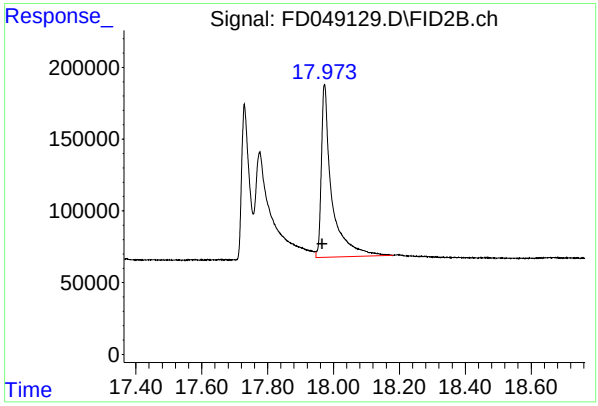

#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.729 min
Delta R.T.: 0.010 min
Response: 1756887
Conc: 16.08 ug/ml m




#20 Dibenz[a,h]anthracene (C30.36)

R.T.: 17.776 min
Delta R.T.: 0.017 min
Response: 2586904
Conc: 16.67 ug/ml




#21 Benzo[g,h,i]perylene (C34.01)

R.T.: 17.973 min
Delta R.T.: 0.007 mi
Response: 2645183
Conc: 18.25 ug/m

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD

**Manual Integrations**
**APPROVED**

Reviewed By :Yogesh Patel 03/03/2025
Supervised By :Ankita Jodhani 03/04/2025

**Instrument :**
FID_D
**LabSampleId :**
20 PPM AROMATIC HC STD

rteres

Area Percent Report

**Manual IntegrationsAPPROVED**

Reviewed By :Yogesh Patel 03/03/2025
Supervised By :Ankita Jodhani 03/04/2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD02282
Data File : FD049129.D
Signal(s) : FID2B.ch
Acq On : 28 Feb 2025 10:23
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Title : GC Extractables

Signal : FID2B.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 4.176 | 4.130 | 4.334 | BB | 312663 | 3087214 | 95.13% | 5.304% |
| 2 | 5.694 | 5.642 | 5.899 | BB | 250529 | 3073038 | 94.70% | 5.280% |
| 3 | 6.740 | 6.714 | 6.949 | PB | 222312 | 3030795 | 93.39% | 5.208% |
| 4 | 7.353 | 7.300 | 7.542 | BB | 219818 | 2766220 | 85.24% | 4.753% |
| 5 | 8.004 | 7.960 | 8.144 | BB | 277198 | 3126284 | 96.34% | 5.372% |
| 6 | 8.205 | 8.160 | 8.273 | BV | 117209 | 1579167 | 48.66% | 2.713% |
| 7 | 8.296 | 8.273 | 8.442 | VB | 296676 | 3245153 | 100.00% | 5.576% |
| 8 | 9.078 | 9.020 | 9.302 | BB | 216484 | 3004154 | 92.57% | 5.162% |
| 9 | 10.464 | 10.402 | 10.520 | BV | 254175 | 2861190 | 88.17% | 4.916% |
| 10 | 10.542 | 10.520 | 10.780 | VB | 170899 | 2864021 | 88.26% | 4.921% |
| 11 | 11.233 | 11.097 | 11.340 | BB | 284580 | 3098268 | 95.47% | 5.323% |
| 12 | 12.269 | 12.245 | 12.395 | PV | 202620 | 2912936 | 89.76% | 5.005% |
| 13 | 12.561 | 12.520 | 12.679 | BV | 206714 | 2912549 | 89.75% | 5.004% |
| 14 | 14.431 | 14.337 | 14.452 | BV | 210851 | 2400791 | 73.98% | 4.125% |
| 15 | 14.472 | 14.452 | 14.689 | VB | 164479 | 3110275 | 95.84% | 5.344% |
| 16 | 15.978 | 15.930 | 15.994 | BV | 222862 | 2577213 | 79.42% | 4.428% |
| 17 | 16.010 | 15.994 | 16.212 | VB | 171182 | 3069763 | 94.60% | 5.275% |
| 18 | 16.362 | 16.305 | 16.574 | BB | 134262 | 2597623 | 80.05% | 4.463% |
| 19 | 17.730 | 17.690 | 17.757 | BV | 107493 | 1651182 | 50.88% | 2.837% |
| 20 | 17.776 | 17.757 | 17.947 | VV | 74288 | 2586904 | 79.72% | 4.445% |
| 21 | 17.973 | 17.947 | 18.180 | VV | 120236 | 2645183 | 81.51% | 4.545% |
| | | | Sum of corrected areas: | | | 58199919 | | |

Aromatic EPH 021125.M Sat Mar 01 03:51:00 2025

Evaluate Continuing Calibration Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022825AR\
Data File : FD049129.D
Signal(s) : FID2B.ch
Acq On : 28 Feb 2025 10:23
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 52 Sample Multiplier: 1

**Instrument :**
FID_D
**LabSampleId :**
20 PPM AROMATIC HC STD

Integration File: autoint1.e
Quant Time: Mar 01 02:16:15 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 1 | T | 1,2,3-Trimethylbenzene (C10 | 159.254 | 154.361 | E3 | 3.1 | 99 | 0.00 |
| 2 | T | Naphthalene (C11.7) | 158.788 | 153.652 | E3 | 3.2 | 98 | 0.00 |
| 3 | T | 2-Methylnaphthalene (C12.89 | 155.693 | 151.540 | E3 | 2.7 | 98 | 0.00 |
| 4 | S | 2-Bromonaphthalene (SURR) | 143.109 | 138.311 | E3 | 3.4 | 98 | 0.00 |
| 5 | T | Acenaphthylene (C15.06) | 162.606 | 156.314 | E3 | 3.9 | 98 | 0.00 |
| 6 | S | 2-Flurobiphenyl (SURR) | 87.912 | 78.958 | E3 | 10.2 | 89 | 0.00 |
| 7 | T | Acenaphthene (C15.5) | 164.509 | 162.258 | E3 | 1.4 | 101 | 0.00 |
| 8 | T | Flouorene (C16.55) | 157.649 | 150.208 | E3 | 4.7 | 96 | 0.00 |
| 9 | T | Phenanthrene (C19.36) | 150.701 | 143.059 | E3 | 5.1 | 96 | 0.00 |
| 10 | T | Anthracene (C19.43) | 151.028 | 143.201 | E3 | 5.2 | 95 | 0.00 |
| 11 | S | ortho-Terphenyl (SURR) | 161.774 | 154.913 | E3 | 4.2 | 97 | 0.00 |
| 12 | T | Fluoranthene (C21.85) | 154.315 | 145.647 | E3 | 5.6 | 95 | 0.00 |
| 13 | T | Pyrene (C20.8) | 154.058 | 145.627 | E3 | 5.5 | 97 | 0.00 |
| 14 | T | Benzo[a]anthracene (C26.37) | 131.390 | 120.040 | E3 | 8.6 | 89 | 0.00 |
| 15 | T | Chrysene (C27.41) | 161.687 | 155.514 | E3 | 3.8 | 100 | 0.00 |
| 16 | T | benzo[b]fluoranthene (C30.4 | 137.594 | 128.861 | E3 | 6.3 | 92 | 0.00 |
| 17 | T | Bnezo[k]fluoranthene (C30.1 | 157.942 | 153.488 | E3 | 2.8 | 101 | 0.00 |
| 18 | T | Benzo[a]pyrene (C31.34) | 135.737 | 129.881 | E3 | 4.3 | 97 | 0.00 |
| 19 | T | Indeno[1,2,3-cd]pyrene (C35 | 109.277 | 87.844 | E3 | 19.6 | 82 | 0.01 |
| 20 | T | Dibenz[a,h]anthracene (C30. | 155.140 | 129.345 | E3 | 16.6 | 83 | 0.02 |
| 21 | T | Benzo[g,h,i]perylene (C34.0 | 144.951 | 132.259 | E3 | 8.8 | 93 | 0.00 |

Evaluate Continuing Calibration Report - Not Founds

---

(#) = Out of Range SPCC's out = 0 CCC's out = 0

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

# Continuing Calibration Report for SequenceID : FD022825AR

| Parameter | AreaCount | Conc. | RT_Min | RT_Max | Response Factor | AVGRF | %DEV |
|---|---|---|---|---|---|---|---|
| **File ID :** | **FD049139.D** | | | | | | |
| Aromatic C10-C12 | 6813477.000 | 40.000 | 4.076 | 5.794 | 170336.925 | 159020.606 | -7.116 |
| Aromatic C12-C16 | 10472510.000 | 60.000 | 5.795 | 8.396 | 174541.833 | 160935.866 | -8.454 |
| Aromatic C16-C21 | 13024891.000 | 80.000 | 8.397 | 12.661 | 162811.138 | 153359.309 | -6.163 |
| Aromatic C21-C36 | 26617558.000 | 180.000 | 12.662 | 18.073 | 147875.322 | 143114.753 | -3.326 |
| Aromatic EPH | 56928436.000 | 360.000 | 4.076 | 18.073 | 158134.544 | 150128.823 | -5.333 |

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

| | | | |
|---|---|---|---|
| Lab Sample ID: | 20 PPM AROMATIC HC S | Acq On: | 28 Feb 2025 16:30 |
| Client Sample ID: | | Operator: | YP/AJ |
| Data file: | FD049139.D | Misc: | |
| Instrument: | FID_D | ALS Vial: | 52 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | Units |
|---|---|---|---|---|---|
| Aromatic C10-C12 | 4.076 | 5.794 | 6813477.000 | 40.000 | ug/ml |
| Aromatic C12-C16 | 5.795 | 8.396 | 10472510.000 | 60.000 | ug/ml |
| Aromatic C16-C21 | 8.397 | 12.661 | 13024891.000 | 80.000 | ug/ml |
| Aromatic C21-C36 | 12.662 | 18.073 | 26617558.000 | 180.000 | ug/ml |
| Aromatic EPH | 4.076 | 18.073 | 56928436.000 | 360.000 | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022825AR\
Data File : FD049139.D
Signal(s) : FID2B.ch
Acq On : 28 Feb 2025 16:30
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 52 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD

Integration File: autoint1.e
Quant Time: Mar 01 02:19:55 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

| | Compound | R.T. | Response | Conc Units |
|---|---|---|---|---|
| | **System Monitoring Compounds** | | | |
| 4) S | 2-Bromonaphthalene (S... | 7.352 | 3062089 | 21.397 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 42.79% |
| 6) S | 2-Flurobiphenyl (SURR) | 8.204 | 1810963 | 20.600 ug/ml |
| Spiked Amount | 50.000 Range | 0 - 131 | Recovery = | 41.20% |
| 11) S | ortho-Terphenyl (SURR) | 11.233 | 3471724 | 21.460 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 42.92% |
| | **Target Compounds** | | | |
| 1) T | 1,2,3-Trimethylbenzen... | 4.175 | 3399763 | 21.348 ug/ml |
| 2) T | Naphthalene (C11.7) | 5.693 | 3413714 | 21.499 ug/ml |
| 3) T | 2-Methylnaphthalene (... | 6.740 | 3391580 | 21.784 ug/ml |
| 5) T | Acenaphthylene (C15.06) | 8.003 | 3462957 | 21.297 ug/ml |
| 7) T | Acenaphthene (C15.5) | 8.296 | 3617973 | 21.993 ug/ml |
| 8) T | Flouorene (C16.55) | 9.077 | 3337715 | 21.172 ug/ml |
| 9) T | Phenanthrene (C19.36) | 10.464 | 3215091 | 21.334 ug/ml |
| 10) T | Anthracene (C19.43) | 10.542 | 3207397 | 21.237 ug/ml |
| 12) T | Fluoranthene (C21.85) | 12.269 | 3302650 | 21.402 ug/ml |
| 13) T | Pyrene (C20.8) | 12.561 | 3264688 | 21.191 ug/ml |
| 14) T | Benzo[a]anthracene (C... | 14.432 | 2802942 | 21.333 ug/ml |
| 15) T | Chrysene (C27.41) | 14.473 | 3496552 | 21.625 ug/ml |
| 16) T | benzo[b]fluoranthene ... | 15.978 | 2945002 | 21.404 ug/ml |
| 17) T | Bnezo[k]fluoranthene ... | 16.010 | 3328113 | 21.072 ug/ml |
| 18) T | Benzo[a]pyrene (C31.34) | 16.360 | 2719805 | 20.037 ug/ml |
| 19) T | Indeno[1,2,3-cd]pyren... | 17.728 | 1974445 | 18.068 ug/ml |
| 20) T | Dibenz[a,h]anthracene... | 17.769 | 3112363 | 20.062 ug/ml |
| 21) T | Benzo[g,h,i]perylene ... | 17.973 | 2935686 | 20.253 ug/ml |

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

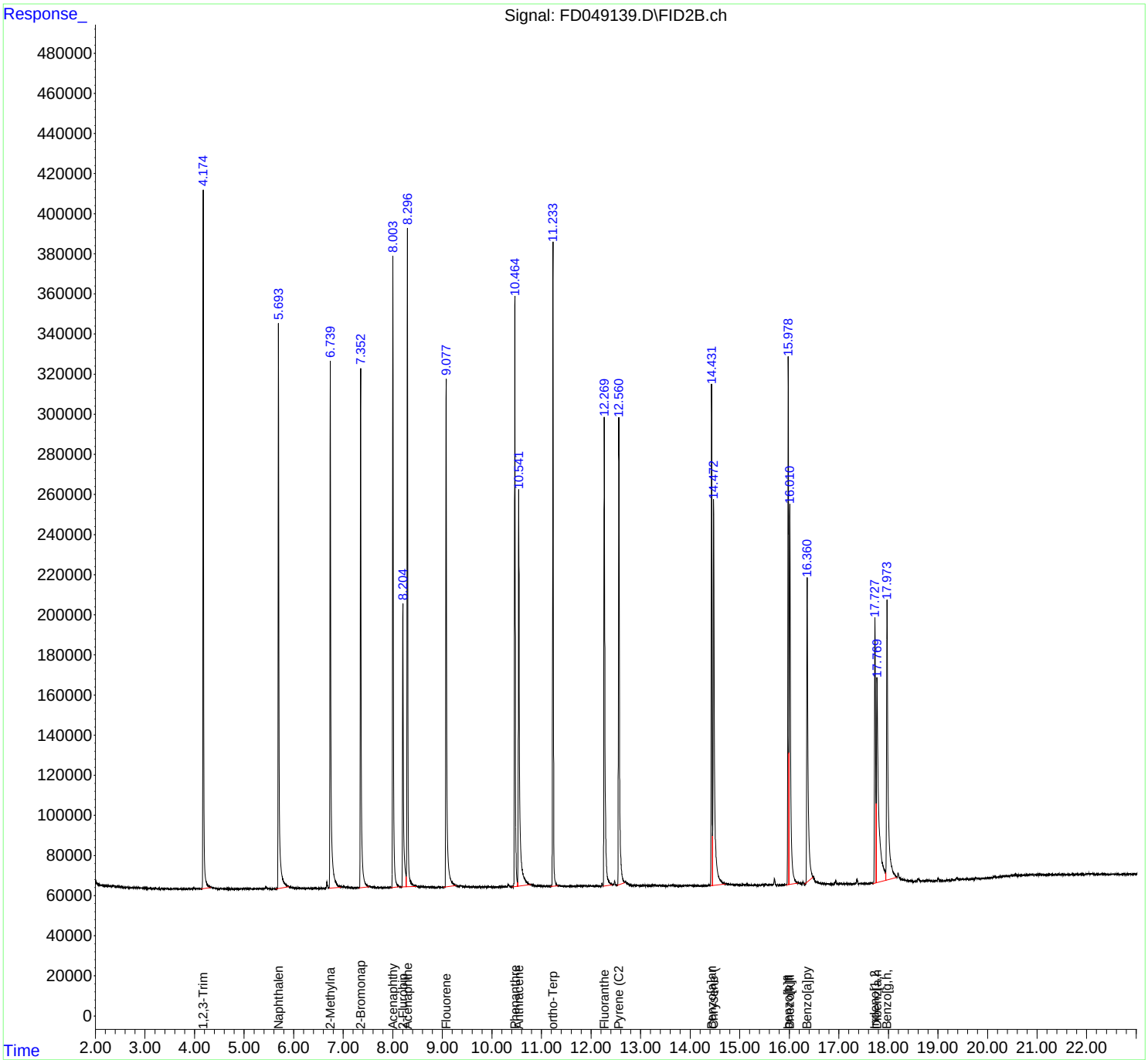
Quantitation Report (QT Reviewed)

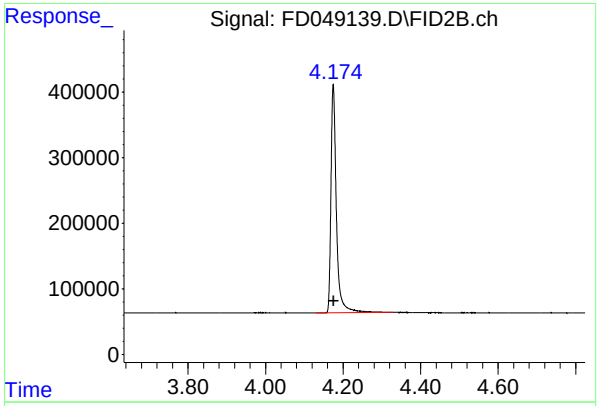
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022825AR\
Data File : FD049139.D
Signal(s) : FID2B.ch
Acq On : 28 Feb 2025 16:30
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 52 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD

Integration File: autoint1.e
Quant Time: Mar 01 02:19:55 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

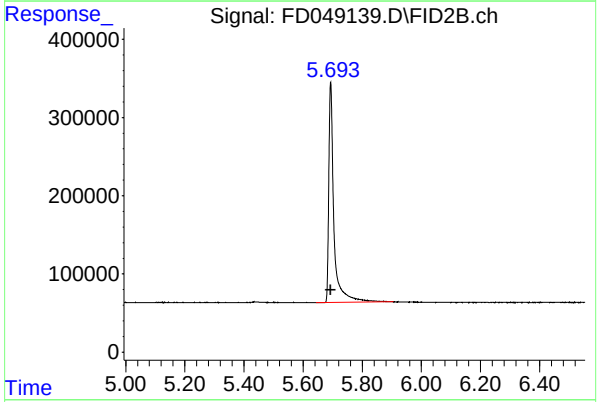





#1 1,2,3-Trimethylbenzene (C10.1)

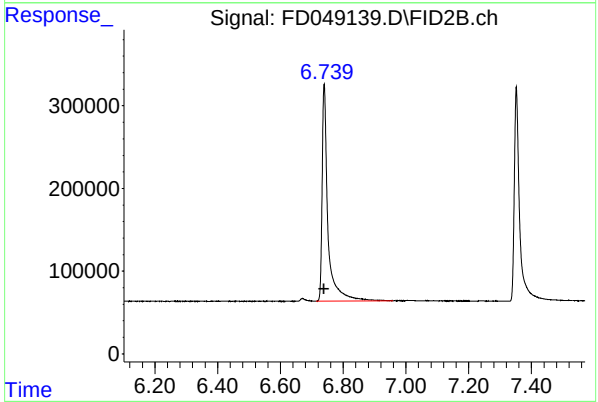
R.T.: 4.175 min
Delta R.T.: -0.001 min
Response: 3399763
Conc: 21.35 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD



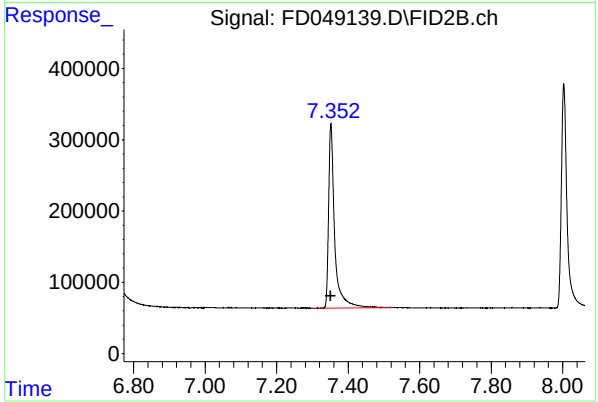

#2 Naphthalene (C11.7)

R.T.: 5.693 min
Delta R.T.: 0.000 min
Response: 3413714
Conc: 21.50 ug/ml



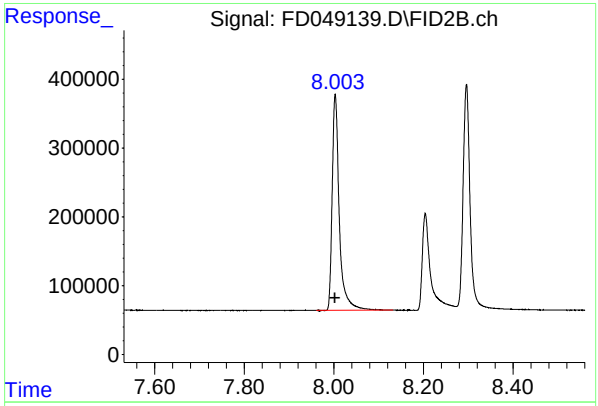

#3 2-Methylnaphthalene (C12.89)

R.T.: 6.740 min
Delta R.T.: 0.000 min
Response: 3391580
Conc: 21.78 ug/ml




#4 2-Bromonaphthalene (SURR)

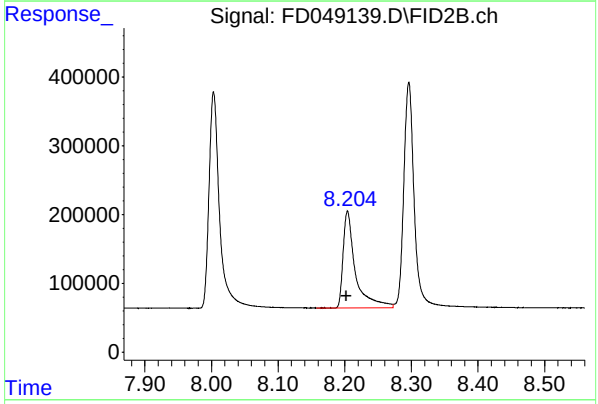
R.T.: 7.352 min
Delta R.T.: 0.000 min
Response: 3062089
Conc: 21.40 ug/ml




#5 Acenaphthylene (C15.06)

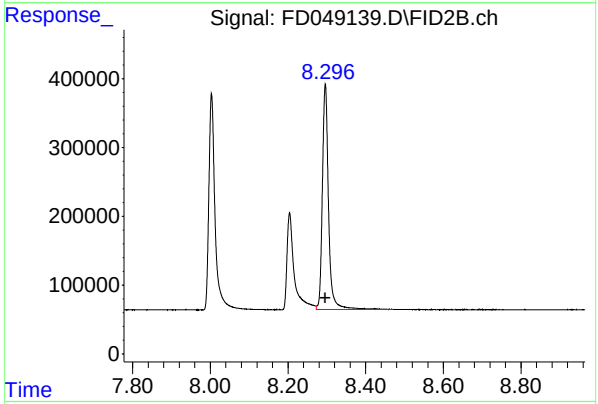
R.T.: 8.003 min
Delta R.T.: 0.000 min
Response: 3462957
Conc: 21.30 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD



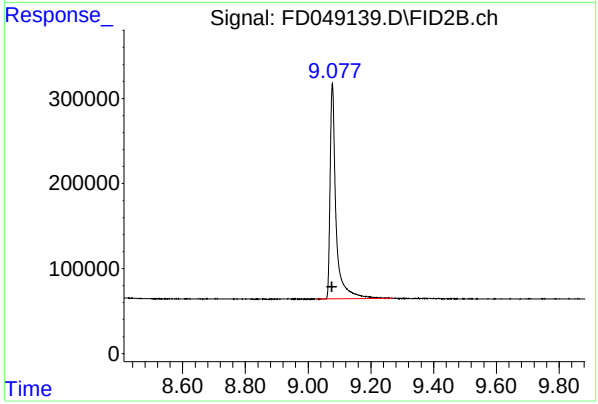

#6 2-Flurobiphenyl (SURR)

R.T.: 8.204 min
Delta R.T.: 0.002 min
Response: 1810963
Conc: 20.60 ug/ml



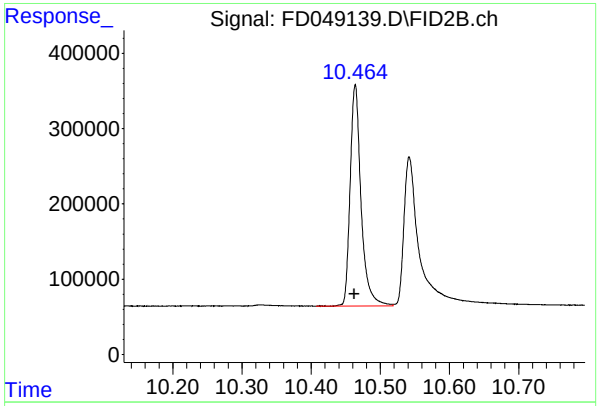

#7 Acenaphthene (C15.5)

R.T.: 8.296 min
Delta R.T.: 0.000 min
Response: 3617973
Conc: 21.99 ug/ml




#8 Flouorene (C16.55)

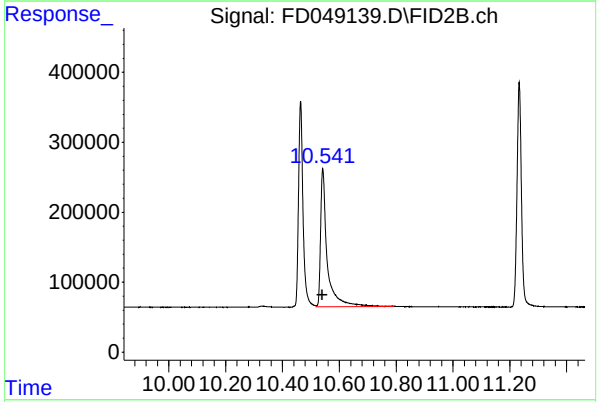
R.T.: 9.077 min
Delta R.T.: 0.001 min
Response: 3337715
Conc: 21.17 ug/ml




#9 Phenanthrene (C19.36)

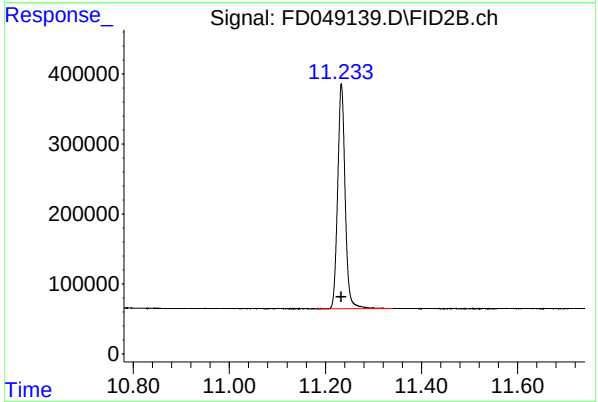
R.T.: 10.464 min
Delta R.T.: 0.000 min
Response: 3215091
Conc: 21.33 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD



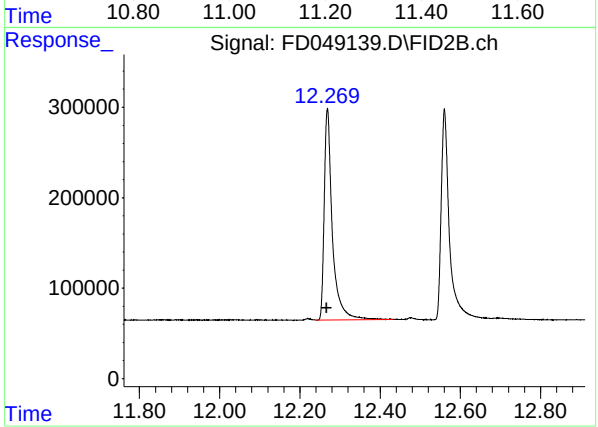

#10 Anthracene (C19.43)

R.T.: 10.542 min
Delta R.T.: 0.002 min
Response: 3207397
Conc: 21.24 ug/ml



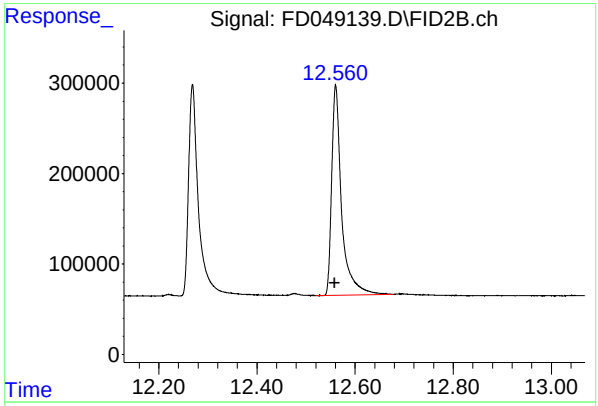

#11 ortho-Terphenyl (SURR)

R.T.: 11.233 min
Delta R.T.: 0.000 min
Response: 3471724
Conc: 21.46 ug/ml




#12 Fluoranthene (C21.85)

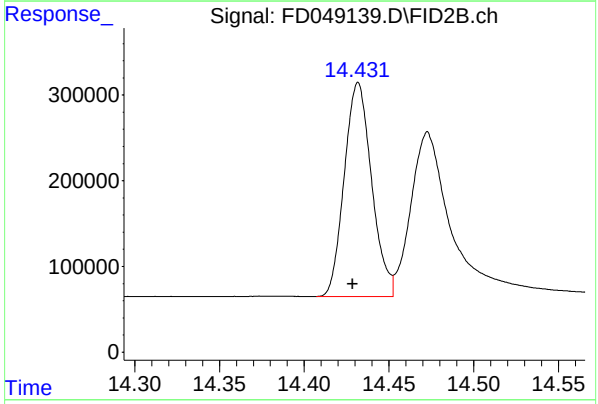
R.T.: 12.269 min
Delta R.T.: 0.002 min
Response: 3302650
Conc: 21.40 ug/ml




#13 Pyrene (C20.8)

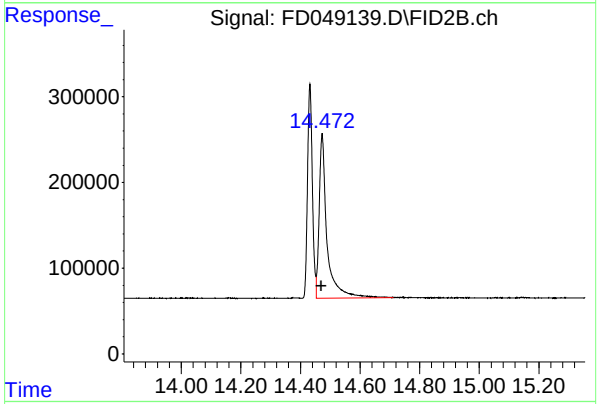
R.T.: 12.561 min
Delta R.T.: 0.002 min
Response: 3264688
Conc: 21.19 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD



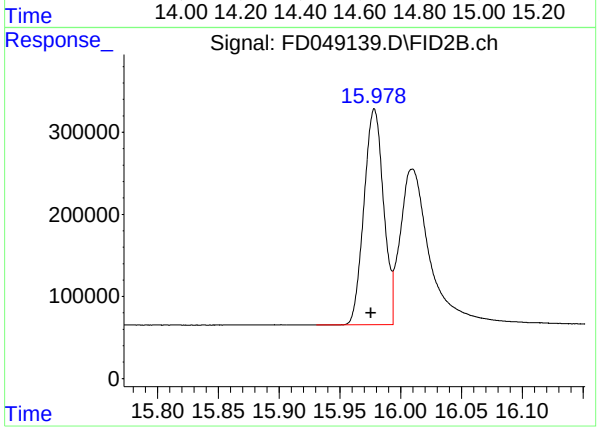

#14 Benzo[a]anthracene (C26.37)

R.T.: 14.432 min
Delta R.T.: 0.003 min
Response: 2802942
Conc: 21.33 ug/ml



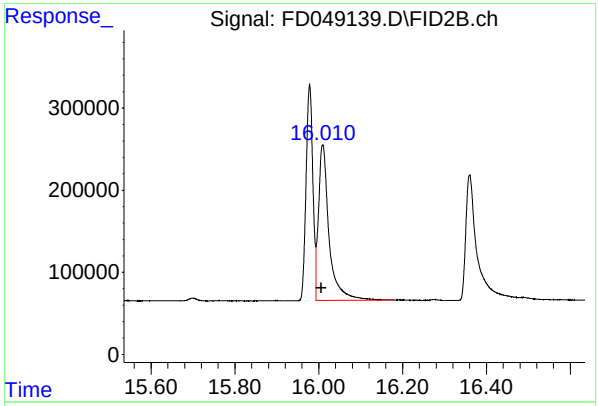

#15 Chrysene (C27.41)

R.T.: 14.473 min
Delta R.T.: 0.003 min
Response: 3496552
Conc: 21.63 ug/ml




#16 benzo[b]fluoranthene (C30.41)

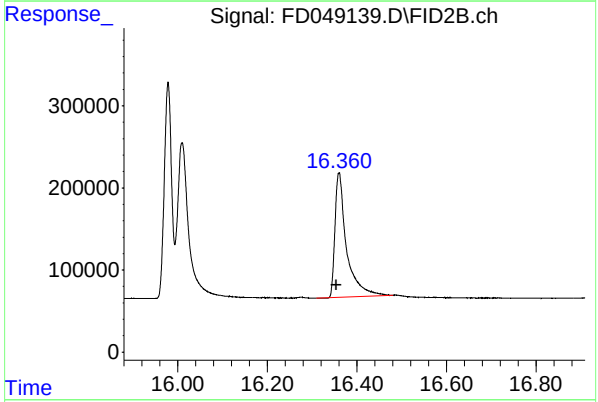
R.T.: 15.978 min
Delta R.T.: 0.003 min
Response: 2945002
Conc: 21.40 ug/ml




#17 Bnezo[k]fluoranthene (C30.14)

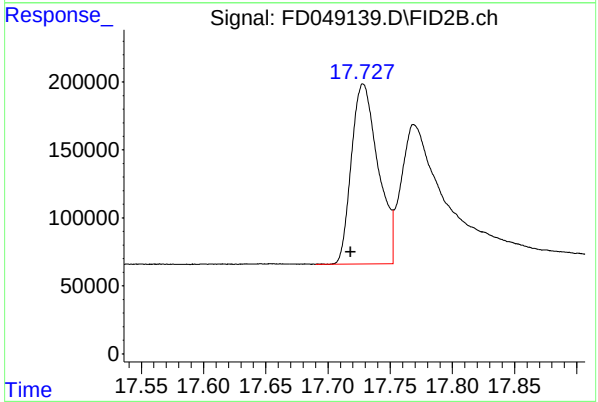
R.T.: 16.010 min
Delta R.T.: 0.003 min
Response: 3328113
Conc: 21.07 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD



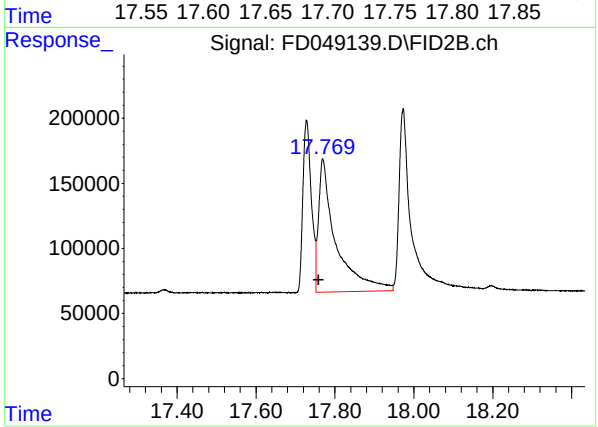

#18 Benzo[a]pyrene (C31.34)

R.T.: 16.360 min
Delta R.T.: 0.006 min
Response: 2719805
Conc: 20.04 ug/ml



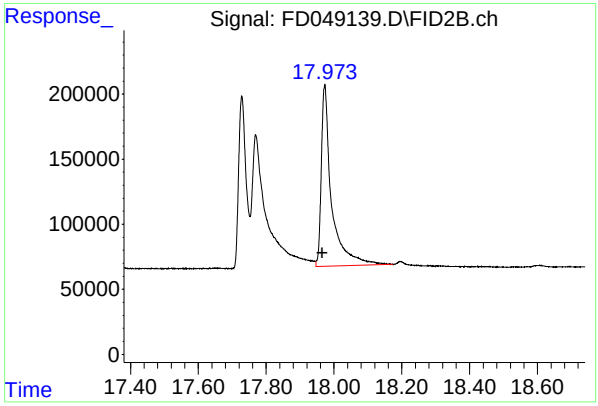

#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.728 min
Delta R.T.: 0.010 min
Response: 1974445
Conc: 18.07 ug/ml




#20 Dibenz[a,h]anthracene (C30.36)

R.T.: 17.769 min
Delta R.T.: 0.010 min
Response: 3112363
Conc: 20.06 ug/ml




#21 Benzo[g,h,i]perylene (C34.01)

R.T.: 17.973 min
Delta R.T.: 0.007 mi
Response: 2935686
Conc: 20.25 ug/m

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022825AR\
Data File : FD049139.D
Signal(s) : FID2B.ch
Acq On : 28 Feb 2025 16:30
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Title : GC Extractables

Signal : FID2B.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 4.175 | 4.130 | 4.329 | BB | 347315 | 3399763 | 93.97% | 5.209% |
| 2 | 5.693 | 5.644 | 5.904 | BB | 281480 | 3413714 | 94.35% | 5.230% |
| 3 | 6.740 | 6.714 | 6.959 | PV | 262624 | 3391580 | 93.74% | 5.196% |
| 4 | 7.352 | 7.310 | 7.525 | BB | 258504 | 3062089 | 84.64% | 4.691% |
| 5 | 8.003 | 7.960 | 8.132 | BB | 313684 | 3462957 | 95.72% | 5.305% |
| 6 | 8.204 | 8.157 | 8.272 | BV | 140970 | 1810963 | 50.05% | 2.774% |
| 7 | 8.296 | 8.272 | 8.470 | VB | 328959 | 3617973 | 100.00% | 5.543% |
| 8 | 9.077 | 9.025 | 9.270 | BB | 252925 | 3337715 | 92.25% | 5.113% |
| 9 | 10.464 | 10.407 | 10.518 | BV | 294137 | 3215091 | 88.86% | 4.926% |
| 10 | 10.542 | 10.518 | 10.789 | VB | 197481 | 3207397 | 88.65% | 4.914% |
| 11 | 11.233 | 11.180 | 11.340 | BB | 319815 | 3471724 | 95.96% | 5.319% |
| 12 | 12.269 | 12.240 | 12.432 | PB | 233879 | 3302650 | 91.28% | 5.060% |
| 13 | 12.561 | 12.520 | 12.677 | BV | 232578 | 3264688 | 90.24% | 5.002% |
| 14 | 14.432 | 14.407 | 14.452 | BV | 250173 | 2802942 | 77.47% | 4.294% |
| 15 | 14.473 | 14.452 | 14.710 | VB | 191741 | 3496552 | 96.64% | 5.357% |
| 16 | 15.978 | 15.930 | 15.994 | BV | 263046 | 2945002 | 81.40% | 4.512% |
| 17 | 16.010 | 15.994 | 16.177 | VV | 189631 | 3328113 | 91.99% | 5.099% |
| 18 | 16.360 | 16.309 | 16.480 | BV | 151978 | 2719805 | 75.17% | 4.167% |
| 19 | 17.728 | 17.690 | 17.752 | BV | 132307 | 1974445 | 54.57% | 3.025% |
| 20 | 17.769 | 17.752 | 17.947 | VV | 102302 | 3112363 | 86.03% | 4.768% |
| 21 | 17.973 | 17.947 | 18.174 | VV | 138958 | 2935686 | 81.14% | 4.498% |
| | | | Sum of corrected areas: | | | 65273211 | | |

Aromatic EPH 021125.M Sat Mar 01 03:55:59 2025

Evaluate Continuing Calibration Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022825AR\
Data File : FD049139.D
Signal(s) : FID2B.ch
Acq On : 28 Feb 2025 16:30
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 52 Sample Multiplier: 1

**Instrument :**
FID_D
**LabSampleId :**
20 PPM AROMATIC HC STD

Integration File: autoint1.e
Quant Time: Mar 01 02:19:55 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 1 | T | 1,2,3-Trimethylbenzene (C10 | 159.254 | 169.988 | E3 | -6.7 | 109 | 0.00 |
| 2 | T | Naphthalene (C11.7) | 158.788 | 170.686 | E3 | -7.5 | 109 | 0.00 |
| 3 | T | 2-Methylnaphthalene (C12.89 | 155.693 | 169.579 | E3 | -8.9 | 109 | 0.00 |
| 4 | S | 2-Bromonaphthalene (SURR) | 143.109 | 153.104 | E3 | -7.0 | 108 | 0.00 |
| 5 | T | Acenaphthylene (C15.06) | 162.606 | 173.148 | E3 | -6.5 | 108 | 0.00 |
| 6 | S | 2-Flurobiphenyl (SURR) | 87.912 | 90.548 | E3 | -3.0 | 102 | 0.00 |
| 7 | T | Acenaphthene (C15.5) | 164.509 | 180.899 | E3 | -10.0 | 113 | 0.00 |
| 8 | T | Flouorene (C16.55) | 157.649 | 166.886 | E3 | -5.9 | 107 | 0.00 |
| 9 | T | Phenanthrene (C19.36) | 150.701 | 160.755 | E3 | -6.7 | 107 | 0.00 |
| 10 | T | Anthracene (C19.43) | 151.028 | 160.370 | E3 | -6.2 | 107 | 0.00 |
| 11 | S | ortho-Terphenyl (SURR) | 161.774 | 173.586 | E3 | -7.3 | 109 | 0.00 |
| 12 | T | Fluoranthene (C21.85) | 154.315 | 165.132 | E3 | -7.0 | 108 | 0.00 |
| 13 | T | Pyrene (C20.8) | 154.058 | 163.234 | E3 | -6.0 | 108 | 0.00 |
| 14 | T | Benzo[a]anthracene (C26.37) | 131.390 | 140.147 | E3 | -6.7 | 104 | 0.00 |
| 15 | T | Chrysene (C27.41) | 161.687 | 174.828 | E3 | -8.1 | 113 | 0.00 |
| 16 | T | benzo[b]fluoranthene (C30.4 | 137.594 | 147.250 | E3 | -7.0 | 105 | 0.00 |
| 17 | T | Bnezo[k]fluoranthene (C30.1 | 157.942 | 166.406 | E3 | -5.4 | 109 | 0.00 |
| 18 | T | Benzo[a]pyrene (C31.34) | 135.737 | 135.990 | E3 | -0.2 | 101 | 0.00 |
| 19 | T | Indeno[1,2,3-cd]pyrene (C35 | 109.277 | 98.722 | E3 | 9.7 | 92 | 0.01 |
| 20 | T | Dibenz[a,h]anthracene (C30. | 155.140 | 155.618 | E3 | -0.3 | 100 | 0.01 |
| 21 | T | Benzo[g,h,i]perylene (C34.0 | 144.951 | 146.784 | E3 | -1.3 | 104 | 0.00 |

Evaluate Continuing Calibration Report - Not Founds

---

(#) = Out of Range SPCC's out = 0 CCC's out = 0

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

# Continuing Calibration Report for SequenceID : FD022825AR

| Parameter | AreaCount | Conc. | RT_Min | RT_Max | Response Factor | AVGRF | %DEV |
|---|---|---|---|---|---|---|---|
| **File ID :** | **FD049149.D** | | | | | | |
| Aromatic C10-C12 | 6973708.000 | 40.000 | 4.076 | 5.794 | 174342.700 | 159020.606 | -9.635 |
| Aromatic C12-C16 | 10519197.000 | 60.000 | 5.795 | 8.396 | 175319.950 | 160935.866 | -8.938 |
| Aromatic C16-C21 | 13182289.000 | 80.000 | 8.397 | 12.661 | 164778.613 | 153359.309 | -7.446 |
| Aromatic C21-C36 | 27715585.000 | 180.000 | 12.662 | 18.073 | 153975.472 | 143114.753 | -7.589 |
| Aromatic EPH | 58390779.000 | 360.000 | 4.076 | 18.073 | 162196.608 | 150128.823 | -8.038 |

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

| | | | |
|---|---|---|---|
| Lab Sample ID: | 20 PPM AROMATIC HC S | Acq On: | 28 Feb 2025 23:50 |
| Client Sample ID: | | Operator: | YP/AJ |
| Data file: | FD049149.D | Misc: | |
| Instrument: | FID_D | ALS Vial: | 52 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | Units |
|---|---|---|---|---|---|
| Aromatic C10-C12 | 4.076 | 5.794 | 6973708.000 | 40.000 | ug/ml |
| Aromatic C12-C16 | 5.795 | 8.396 | 10519197.000 | 60.000 | ug/ml |
| Aromatic C16-C21 | 8.397 | 12.661 | 13182289.000 | 80.000 | ug/ml |
| Aromatic C21-C36 | 12.662 | 18.073 | 27715585.000 | 180.000 | ug/ml |
| Aromatic EPH | 4.076 | 18.073 | 58390779.000 | 360.000 | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022825AR\
Data File : FD049149.D
Signal(s) : FID2B.ch
Acq On : 28 Feb 2025 23:50
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 52 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD

Integration File: autoint1.e
Quant Time: Mar 01 02:23:59 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

| | Compound | R.T. | Response | Conc Units |
|---|---|---|---|---|
| | **System Monitoring Compounds** | | | |
| 4) S | 2-Bromonaphthalene (S... | 7.351 | 3112938 | 21.752 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 43.50% |
| 6) S | 2-Flurobiphenyl (SURR) | 8.202 | 1935781 | 22.020 ug/ml |
| Spiked Amount | 50.000 Range | 0 - 131 | Recovery = | 44.04% |
| 11) S | ortho-Terphenyl (SURR) | 11.233 | 3516404 | 21.736 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 43.47% |
| | **Target Compounds** | | | |
| 1) T | 1,2,3-Trimethylbenzen... | 4.174 | 3482094 | 21.865 ug/ml |
| 2) T | Naphthalene (C11.7) | 5.692 | 3491614 | 21.989 ug/ml |
| 3) T | 2-Methylnaphthalene (... | 6.738 | 3436502 | 22.072 ug/ml |
| 5) T | Acenaphthylene (C15.06) | 8.002 | 3538476 | 21.761 ug/ml |
| 7) T | Acenaphthene (C15.5) | 8.295 | 3544219 | 21.544 ug/ml |
| 8) T | Flouorene (C16.55) | 9.076 | 3414145 | 21.657 ug/ml |
| 9) T | Phenanthrene (C19.36) | 10.463 | 3285846 | 21.804 ug/ml |
| 10) T | Anthracene (C19.43) | 10.540 | 3144239 | 20.819 ug/ml |
| 12) T | Fluoranthene (C21.85) | 12.268 | 3406381 | 22.074 ug/ml |
| 13) T | Pyrene (C20.8) | 12.560 | 3338059 | 21.667 ug/ml |
| 14) T | Benzo[a]anthracene (C... | 14.431 | 2962829 | 22.550 ug/ml |
| 15) T | Chrysene (C27.41) | 14.472 | 3493330 | 21.606 ug/ml |
| 16) T | benzo[b]fluoranthene ... | 15.979 | 3063160 | 22.262 ug/ml |
| 17) T | Bnezo[k]fluoranthene ... | 16.010 | 3396369 | 21.504 ug/ml |
| 18) T | Benzo[a]pyrene (C31.34) | 16.358 | 2853122 | 21.020 ug/ml |
| 19) T | Indeno[1,2,3-cd]pyren... | 17.724 | 2187483 | 20.018 ug/ml |
| 20) T | Dibenz[a,h]anthracene... | 17.764 | 3318186 | 21.388 ug/ml |
| 21) T | Benzo[g,h,i]perylene ... | 17.972 | 3034725 | 20.936 ug/ml |

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

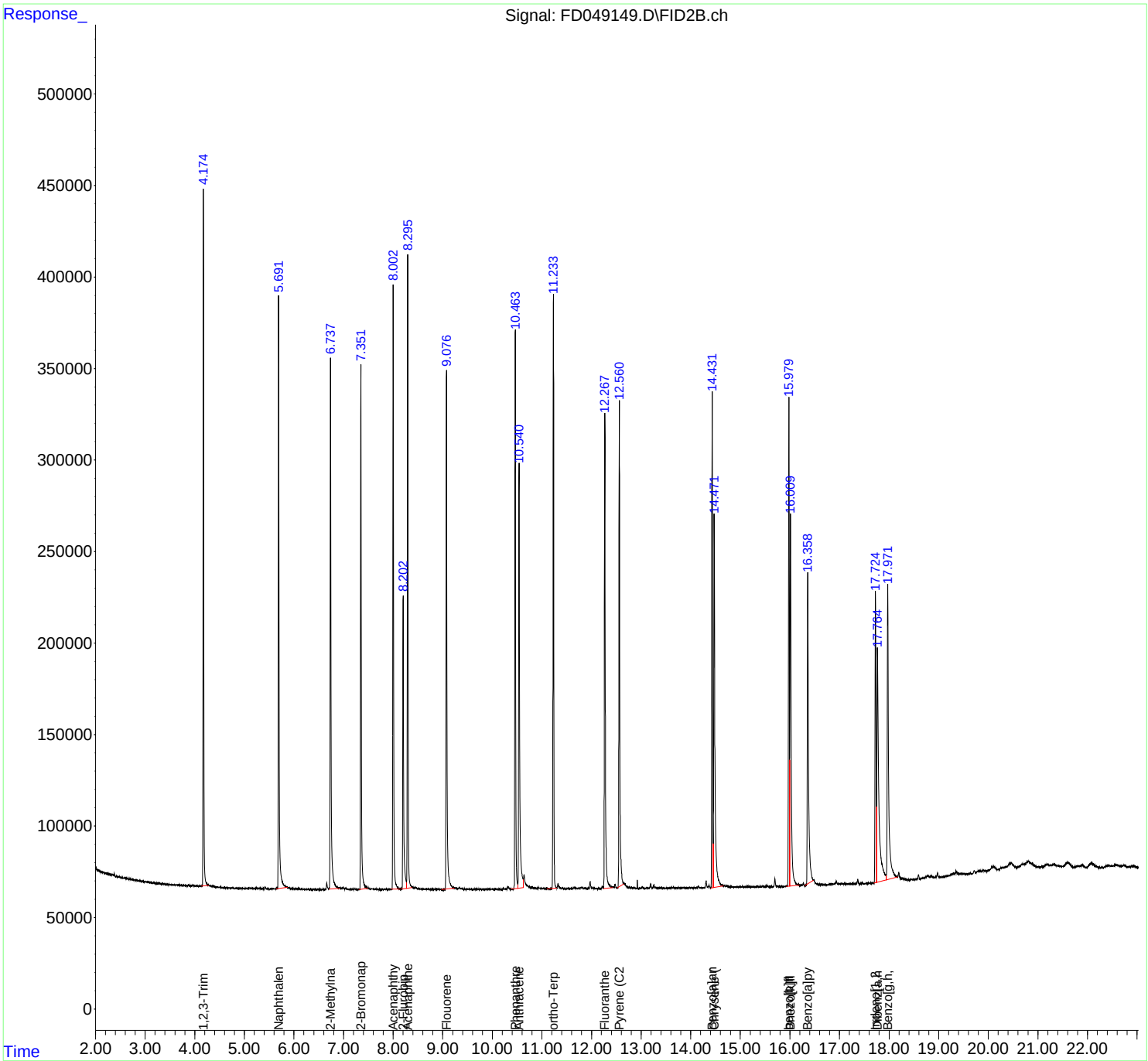
Quantitation Report (QT Reviewed)

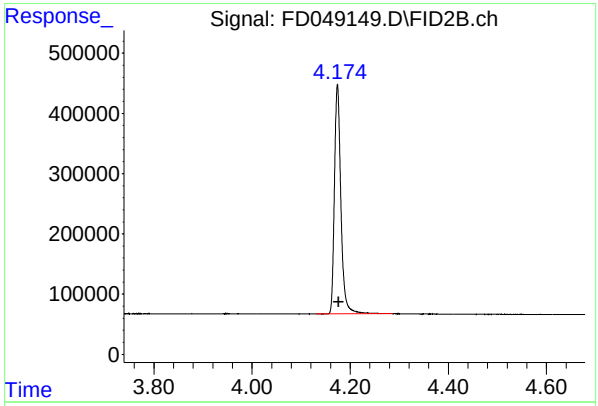
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022825AR\
Data File : FD049149.D
Signal(s) : FID2B.ch
Acq On : 28 Feb 2025 23:50
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 52 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD

Integration File: autoint1.e
Quant Time: Mar 01 02:23:59 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

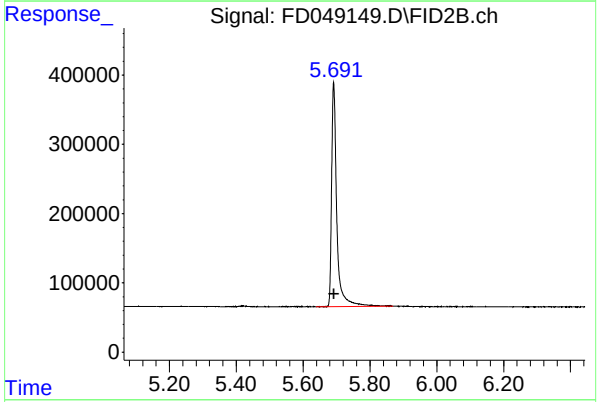





#1 1,2,3-Trimethylbenzene (C10.1)

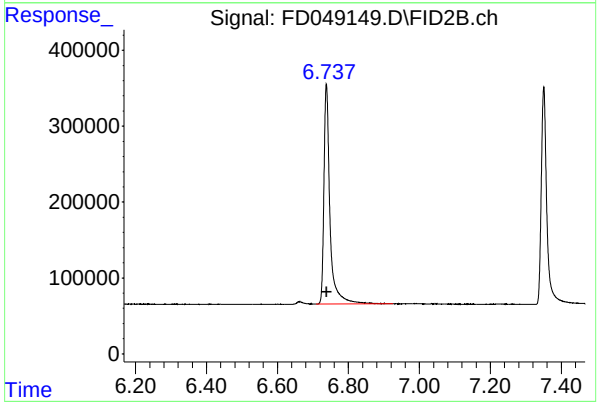
R.T.: 4.174 min
Delta R.T.: -0.002 min
Response: 3482094
Conc: 21.87 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD



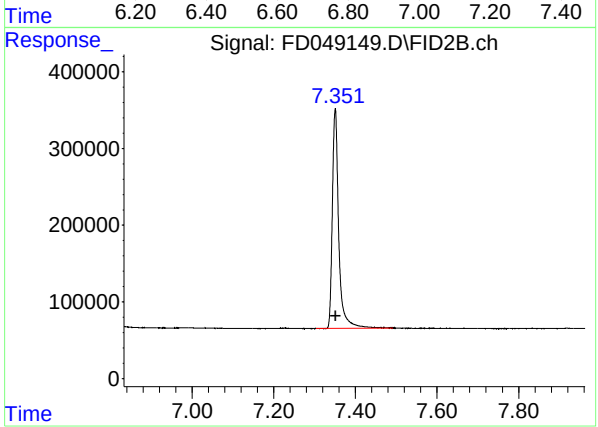

#2 Naphthalene (C11.7)

R.T.: 5.692 min
Delta R.T.: -0.001 min
Response: 3491614
Conc: 21.99 ug/ml



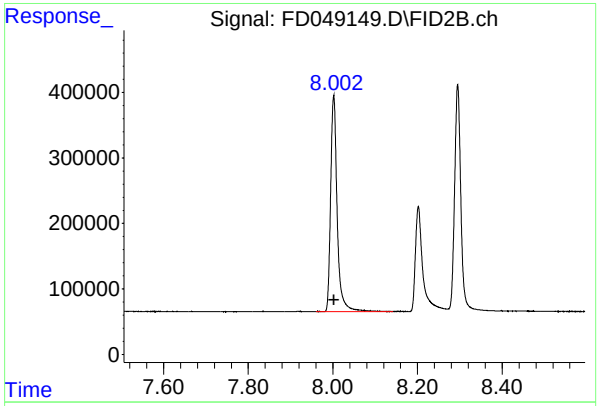

#3 2-Methylnaphthalene (C12.89)

R.T.: 6.738 min
Delta R.T.: 0.000 min
Response: 3436502
Conc: 22.07 ug/ml




#4 2-Bromonaphthalene (SURR)

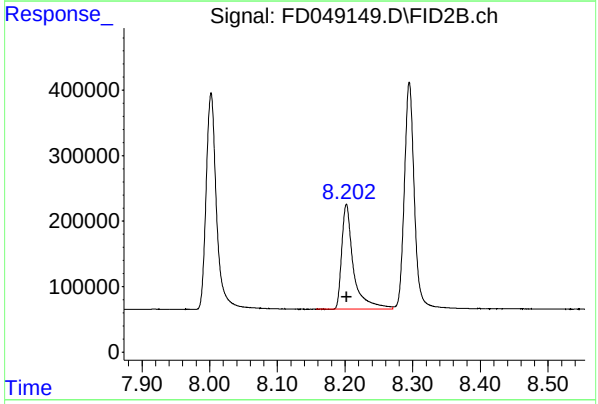
R.T.: 7.351 min
Delta R.T.: 0.000 min
Response: 3112938
Conc: 21.75 ug/ml




#5 Acenaphthylene (C15.06)

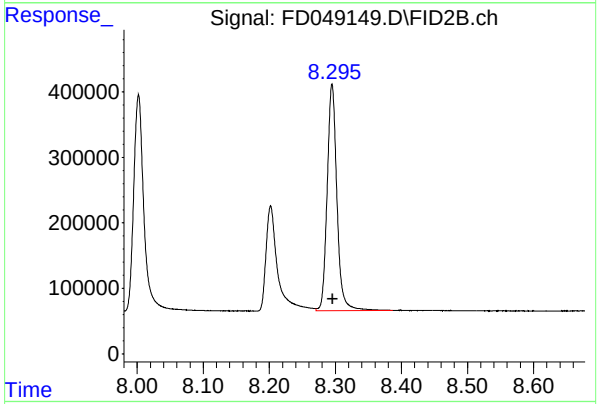
R.T.: 8.002 min
Delta R.T.: 0.000 min
Response: 3538476
Conc: 21.76 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD



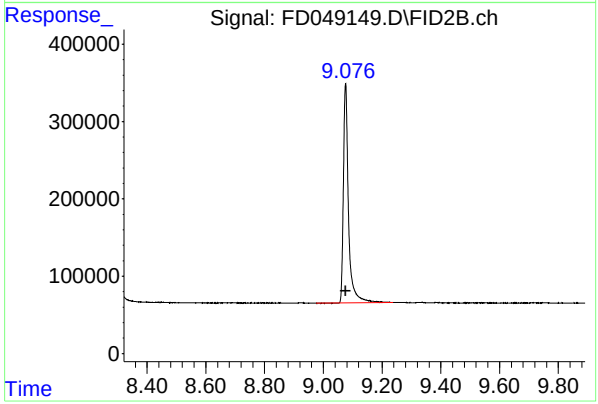

#6 2-Flurobiphenyl (SURR)

R.T.: 8.202 min
Delta R.T.: 0.000 min
Response: 1935781
Conc: 22.02 ug/ml



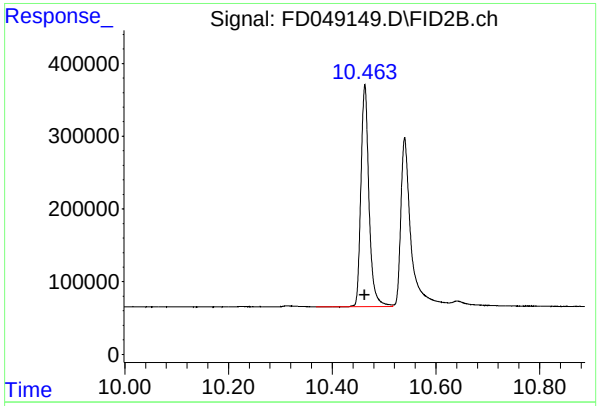

#7 Acenaphthene (C15.5)

R.T.: 8.295 min
Delta R.T.: -0.001 min
Response: 3544219
Conc: 21.54 ug/ml




#8 Flouorene (C16.55)

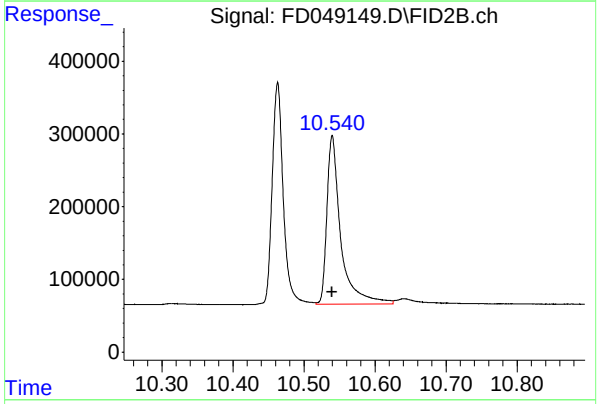
R.T.: 9.076 min
Delta R.T.: 0.000 min
Response: 3414145
Conc: 21.66 ug/ml




#9 Phenanthrene (C19.36)

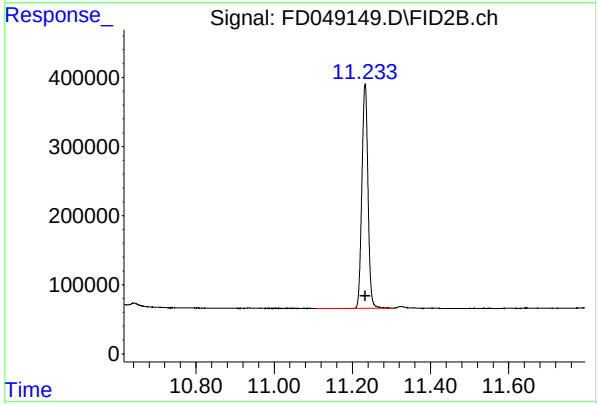
R.T.: 10.463 min
Delta R.T.: 0.000 min
Response: 3285846
Conc: 21.80 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD



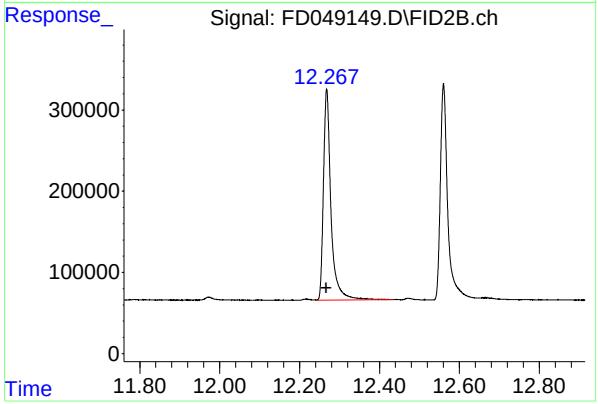

#10 Anthracene (C19.43)

R.T.: 10.540 min
Delta R.T.: 0.000 min
Response: 3144239
Conc: 20.82 ug/ml



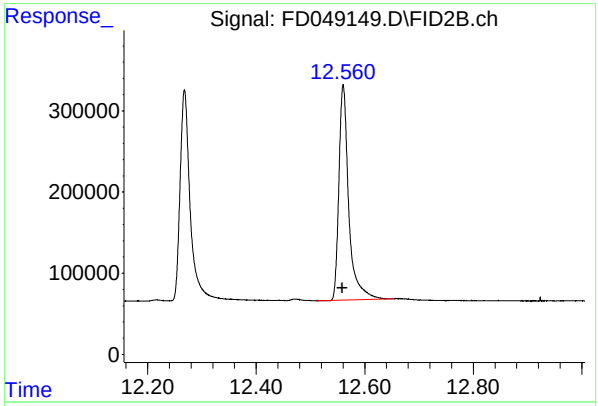

#11 ortho-Terphenyl (SURR)

R.T.: 11.233 min
Delta R.T.: 0.000 min
Response: 3516404
Conc: 21.74 ug/ml




#12 Fluoranthene (C21.85)

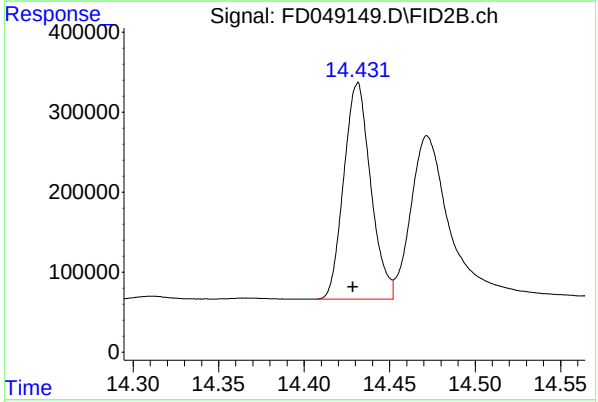
R.T.: 12.268 min
Delta R.T.: 0.001 min
Response: 3406381
Conc: 22.07 ug/ml




#13 Pyrene (C20.8)

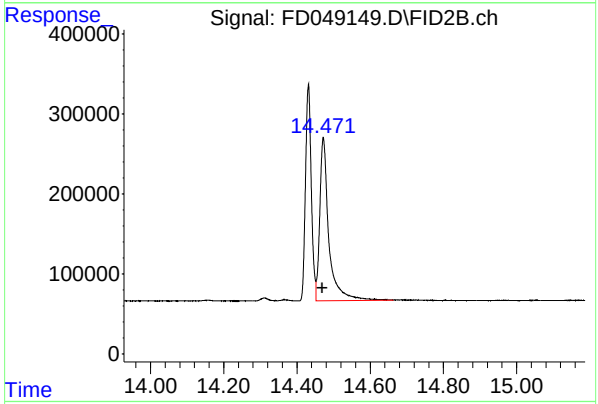
R.T.: 12.560 min
Delta R.T.: 0.002 min
Response: 3338059
Conc: 21.67 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD



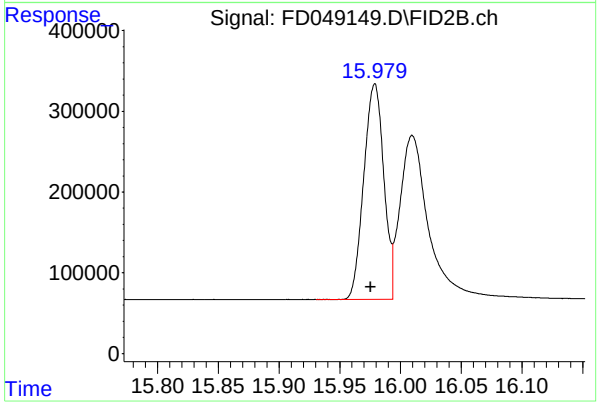

#14 Benzo[a]anthracene (C26.37)

R.T.: 14.431 min
Delta R.T.: 0.003 min
Response: 2962829
Conc: 22.55 ug/ml



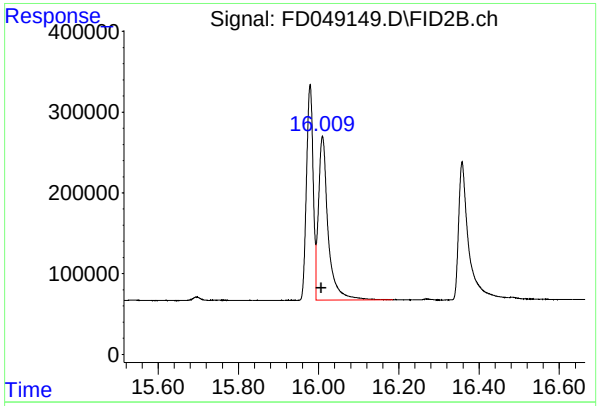

#15 Chrysene (C27.41)

R.T.: 14.472 min
Delta R.T.: 0.003 min
Response: 3493330
Conc: 21.61 ug/ml




#16 benzo[b]fluoranthene (C30.41)

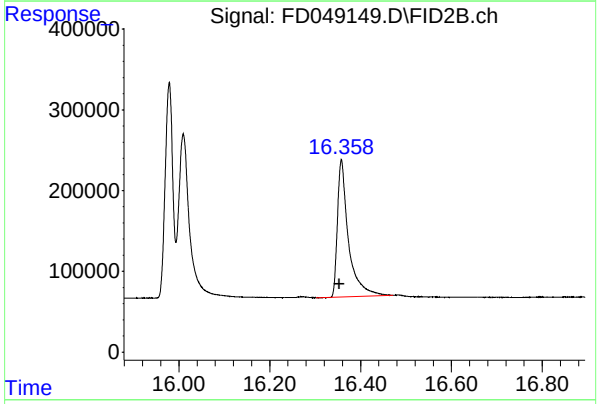
R.T.: 15.979 min
Delta R.T.: 0.003 min
Response: 3063160
Conc: 22.26 ug/ml




#17 Bnezo[k]fluoranthene (C30.14)

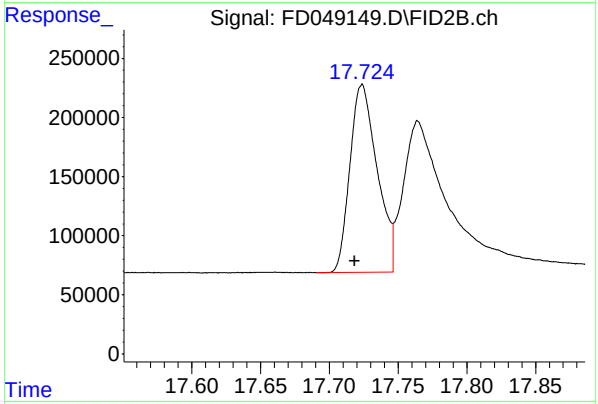
R.T.: 16.010 min
Delta R.T.: 0.004 min
Response: 3396369
Conc: 21.50 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD



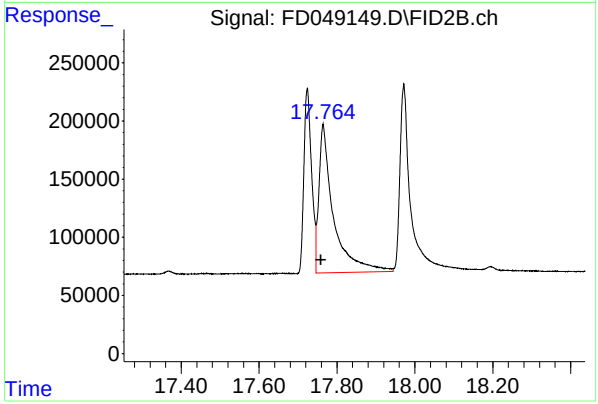

#18 Benzo[a]pyrene (C31.34)

R.T.: 16.358 min
Delta R.T.: 0.004 min
Response: 2853122
Conc: 21.02 ug/ml



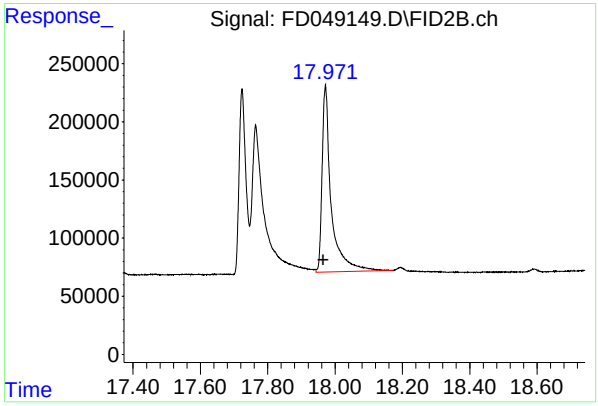

#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.724 min
Delta R.T.: 0.005 min
Response: 2187483
Conc: 20.02 ug/ml




#20 Dibenz[a,h]anthracene (C30.36)

R.T.: 17.764 min
Delta R.T.: 0.005 min
Response: 3318186
Conc: 21.39 ug/ml




#21 Benzo[g,h,i]perylene (C34.01)

R.T.: 17.972 min
Delta R.T.: 0.006 mi
Response: 3034725
Conc: 20.94 ug/m

**Instrument :**
FID_D
**ClientSampleId :**
20 PPM AROMATIC HC STD

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022825AR\
Data File : FD049149.D
Signal(s) : FID2B.ch
Acq On : 28 Feb 2025 23:50
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Title : GC Extractables

Signal : FID2B.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 4.174 | 4.130 | 4.287 | BB | 380598 | 3482094 | 98.25% | 5.201% |
| 2 | 5.692 | 5.639 | 5.869 | BB | 322834 | 3491614 | 98.52% | 5.215% |
| 3 | 6.738 | 6.709 | 6.925 | VB | 289466 | 3436502 | 96.96% | 5.132% |
| 4 | 7.351 | 7.304 | 7.492 | BB | 286209 | 3112938 | 87.83% | 4.649% |
| 5 | 8.002 | 7.960 | 8.142 | BB | 329991 | 3538476 | 99.84% | 5.285% |
| 6 | 8.202 | 8.157 | 8.271 | BV | 160039 | 1935781 | 54.62% | 2.891% |
| 7 | 8.295 | 8.271 | 8.387 | VV | 346026 | 3544219 | 100.00% | 5.293% |
| 8 | 9.076 | 8.975 | 9.237 | BB | 283289 | 3414145 | 96.33% | 5.099% |
| 9 | 10.463 | 10.369 | 10.517 | BV | 305602 | 3285846 | 92.71% | 4.907% |
| 10 | 10.540 | 10.517 | 10.625 | VV | 232207 | 3144239 | 88.71% | 4.696% |
| 11 | 11.233 | 11.107 | 11.304 | BV | 324629 | 3516404 | 99.22% | 5.252% |
| 12 | 12.268 | 12.241 | 12.434 | VV | 259716 | 3406381 | 96.11% | 5.087% |
| 13 | 12.560 | 12.510 | 12.652 | BV | 265565 | 3338059 | 94.18% | 4.985% |
| 14 | 14.431 | 14.407 | 14.452 | BV | 272185 | 2962829 | 83.60% | 4.425% |
| 15 | 14.472 | 14.452 | 14.662 | VB | 204003 | 3493330 | 98.56% | 5.217% |
| 16 | 15.979 | 15.930 | 15.994 | BV | 266949 | 3063160 | 86.43% | 4.575% |
| 17 | 16.010 | 15.994 | 16.185 | VB | 202882 | 3396369 | 95.83% | 5.073% |
| 18 | 16.358 | 16.302 | 16.471 | BV | 169879 | 2853122 | 80.50% | 4.261% |
| 19 | 17.724 | 17.690 | 17.746 | BV | 158941 | 2187483 | 61.72% | 3.267% |
| 20 | 17.764 | 17.746 | 17.944 | VV | 127973 | 3318186 | 93.62% | 4.956% |
| 21 | 17.972 | 17.944 | 18.172 | VV | 161265 | 3034725 | 85.62% | 4.532% |

Sum of corrected areas: 66955900

Aromatic EPH 021125.M Sat Mar 01 03:56:54 2025

Evaluate Continuing Calibration Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022825AR\
Data File : FD049149.D
Signal(s) : FID2B.ch
Acq On : 28 Feb 2025 23:50
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 52 Sample Multiplier: 1

**Instrument :**
FID_D
**LabSampleId :**
20 PPM AROMATIC HC STD

Integration File: autoint1.e
Quant Time: Mar 01 02:23:59 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | | %Dev | Area% | Dev(Min) |
|---|---|---|---|---|---|---|---|---|
| 1 | T | 1,2,3-Trimethylbenzene (C10 | 159.254 | 174.105 | E3 | -9.3 | 112 | 0.00 |
| 2 | T | Naphthalene (C11.7) | 158.788 | 174.581 | E3 | -9.9 | 111 | 0.00 |
| 3 | T | 2-Methylnaphthalene (C12.89 | 155.693 | 171.825 | E3 | -10.4 | 111 | 0.00 |
| 4 | S | 2-Bromonaphthalene (SURR) | 143.109 | 155.647 | E3 | -8.8 | 110 | 0.00 |
| 5 | T | Acenaphthylene (C15.06) | 162.606 | 176.924 | E3 | -8.8 | 111 | 0.00 |
| 6 | S | 2-Flurobiphenyl (SURR) | 87.912 | 96.789 | E3 | -10.1 | 109 | 0.00 |
| 7 | T | Acenaphthene (C15.5) | 164.509 | 177.211 | E3 | -7.7 | 110 | 0.00 |
| 8 | T | Flouorene (C16.55) | 157.649 | 170.707 | E3 | -8.3 | 109 | 0.00 |
| 9 | T | Phenanthrene (C19.36) | 150.701 | 164.292 | E3 | -9.0 | 110 | 0.00 |
| 10 | T | Anthracene (C19.43) | 151.028 | 157.212 | E3 | -4.1 | 104 | 0.00 |
| 11 | S | ortho-Terphenyl (SURR) | 161.774 | 175.820 | E3 | -8.7 | 111 | 0.00 |
| 12 | T | Fluoranthene (C21.85) | 154.315 | 170.319 | E3 | -10.4 | 111 | 0.00 |
| 13 | T | Pyrene (C20.8) | 154.058 | 166.903 | E3 | -8.3 | 111 | 0.00 |
| 14 | T | Benzo[a]anthracene (C26.37) | 131.390 | 148.141 | E3 | -12.7 | 110 | 0.00 |
| 15 | T | Chrysene (C27.41) | 161.687 | 174.666 | E3 | -8.0 | 112 | 0.00 |
| 16 | T | benzo[b]fluoranthene (C30.4 | 137.594 | 153.158 | E3 | -11.3 | 109 | 0.00 |
| 17 | T | Bnezo[k]fluoranthene (C30.1 | 157.942 | 169.818 | E3 | -7.5 | 112 | 0.00 |
| 18 | T | Benzo[a]pyrene (C31.34) | 135.737 | 142.656 | E3 | -5.1 | 106 | 0.00 |
| 19 | T | Indeno[1,2,3-cd]pyrene (C35 | 109.277 | 109.374 | E3 | -0.1 | 102 | 0.00 |
| 20 | T | Dibenz[a,h]anthracene (C30. | 155.140 | 165.909 | E3 | -6.9 | 107 | 0.00 |
| 21 | T | Benzo[g,h,i]perylene (C34.0 | 144.951 | 151.736 | E3 | -4.7 | 107 | 0.00 |

Evaluate Continuing Calibration Report - Not Founds

(#) = Out of Range SPCC's out = 0 CCC's out = 0

# QC SAMPLE DATA

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Weston Solutions, Inc. | Date Collected: | |
| Project: | RFP 905 | Date Received: | |
| Client Sample ID: | PB166883BL | SDG No.: | Q1421 |
| Lab Sample ID: | PB166883BL | Matrix: | Water |
| Analytical Method: | NJEPH | % Solid: | 0 |
| Sample Wt/Vol: | 1000 Units: mL | Final Vol: | 2000 uL |
| Soil Aliquot Vol: | uL | Test: | EPH |
| Prep Method : | SW3510 | | |

| Prep Date : | Date Analyzed : | Prep Batch ID |
|---|---|---|
| 02/26/25 11:45 | 02/27/25 10:26 | PB166883 |

| CAS Number | Parameter | Conc. | Qualifier | Dilution | MDL | LOQ / CRQL | Units | Datafile |
|---|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | | |
| Aliphatic C9-C12 | Aliphatic C9-C12 | 5.76 | U | 1 | 5.76 | 30.0 | ug/l | FC068306.D |
| Aliphatic C12-C16 | Aliphatic C12-C16 | 3.61 | U | 1 | 3.61 | 20.0 | ug/l | FC068306.D |
| Aliphatic C16-C21 | Aliphatic C16-C21 | 5.14 | U | 1 | 5.14 | 30.0 | ug/l | FC068306.D |
| Aliphatic C21-C28 | Aliphatic C21-C28 | 8.97 | U | 1 | 8.97 | 40.0 | ug/l | FC068306.D |
| Aliphatic C28-C40 | Aliphatic C28-C40 | 17.0 | U | 1 | 17.0 | 60.0 | ug/l | FC068306.D |
| Aromatic C10-C12 | Aromatic C10-C12 | 3.32 | U | 1 | 3.32 | 20.0 | ug/l | FD049115.D |
| Aromatic C12-C16 | Aromatic C12-C16 | 3.69 | U | 1 | 3.69 | 30.0 | ug/l | FD049115.D |
| Aromatic C16-C21 | Aromatic C16-C21 | 12.7 | U | 1 | 12.7 | 50.0 | ug/l | FD049115.D |
| Aromatic C21-C36 | Aromatic C21-C36 | 25.2 | U | 1 | 25.2 | 80.0 | ug/l | FD049115.D |
| Total AliphaticEPH | Total AliphaticEPH | 40.5 | U | | 40.5 | 180 | ug/l | |
| Total AromaticEPH | Total AromaticEPH | 44.9 | U | | 44.9 | 180 | ug/l | |
| Total EPH | Total EPH | 85.4 | U | | 85.4 | 360 | ug/l | |

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control 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

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

# Report of Analysis

| | | | | | |
|---|---|---|---|---|---|
| Client: | Weston Solutions, Inc. | | Date Collected: | | |
| Project: | RFP 905 | | Date Received: | | |
| Client Sample ID: | PB166883BL | | SDG No.: | Q1421 | |
| Lab Sample ID: | PB166883BL | | Matrix: | Water | |
| Analytical Method: | NJEPH | | % Solid: | 0 | |
| Sample Wt/Vol: | 1000 | Units: mL | Final Vol: | 2000 | uL |
| Soil Aliquot Vol: | | uL | Test: | EPH | |
| Prep Method : | SW3510 | | | | |

| File ID : | Dilution: | Prep Date : | Date Analyzed : | Prep Batch ID |
|---|---|---|---|---|
| FC068306.D | 1 | 02/26/25 | 02/27/25 | PB166883 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| Aliphatic C9-C12 | Aliphatic C9-C12 | 5.76 | U | 5.76 | 30.0 | ug/l |
| Aliphatic C12-C16 | Aliphatic C12-C16 | 3.61 | U | 3.61 | 20.0 | ug/l |
| Aliphatic C16-C21 | Aliphatic C16-C21 | 5.14 | U | 5.14 | 30.0 | ug/l |
| Aliphatic C21-C28 | Aliphatic C21-C28 | 8.97 | U | 8.97 | 40.0 | ug/l |
| Aliphatic C28-C40 | Aliphatic C28-C40 | 17.0 | U | 17.0 | 60.0 | ug/l |
| **SURROGATES** | | | | | | |
| 3383-33-2 | 1-chlorooctadecane (SURR) | 31.9 | | 40 - 140 | 64% | SPK: 50 |
| 84-15-1 | ortho-Terphenyl (SURR) | 0.00 | | 40 - 140 | 0% | SPK: 50 |

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# Quantitation Report For Aliphatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | PB166883BL | Acq On: | 27 Feb 2025 10:26 |
| Client Sample ID: | PB166883BL | Operator: | YP/AJ |
| Data file: | FC068306.D | Misc: | |
| Instrument: | FID_C | ALS Vial: | 11 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aliphatic C9-C12 | 3.104 | 6.370 | 0 | 0 | 300 | ug/ml |
| Aliphatic C12-C16 | 6.371 | 9.754 | 0 | 0 | 200 | ug/ml |
| Aliphatic C16-C21 | 9.755 | 13.108 | 0 | 0 | 300 | ug/ml |
| Aliphatic C21-C28 | 13.109 | 16.762 | 0 | 0 | 400 | ug/ml |
| Aliphatic C28-C40 | 16.763 | 21.566 | 0 | 0 | 600 | ug/ml |
| Aliphatic EPH | 3.104 | 21.566 | 0 | 0 | | ug/ml |
| ortho-Terphenyl (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |
| 1-chlorooctadecane (SURR) | 12.842 | 12.842 | 3594009 | 31.95 | | ug/ml |
| Aliphatic C9-C28 | 3.104 | 16.762 | 0 | 0 | 1200 | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022725AL\
Data File : FC068306.D
Signal(s) : FID1A.ch
Acq On : 27 Feb 2025 10:26
Operator : YP/AJ
Sample : PB166883BL
Misc :
ALS Vial : 11 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
PB166883BL

Integration File: autoint1.e
Quant Time: Mar 05 04:43:16 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

| Compound | R.T. | Response | Conc Units |
|---|---|---|---|
| System Monitoring Compounds | | | |
| 12) S 1-chlorooctadecane (S... | 12.842 | 3594009 | 31.954 ug/ml |
| Spiked Amount 50.000 | | Recovery = 63.91% | |
| Target Compounds | | | |

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

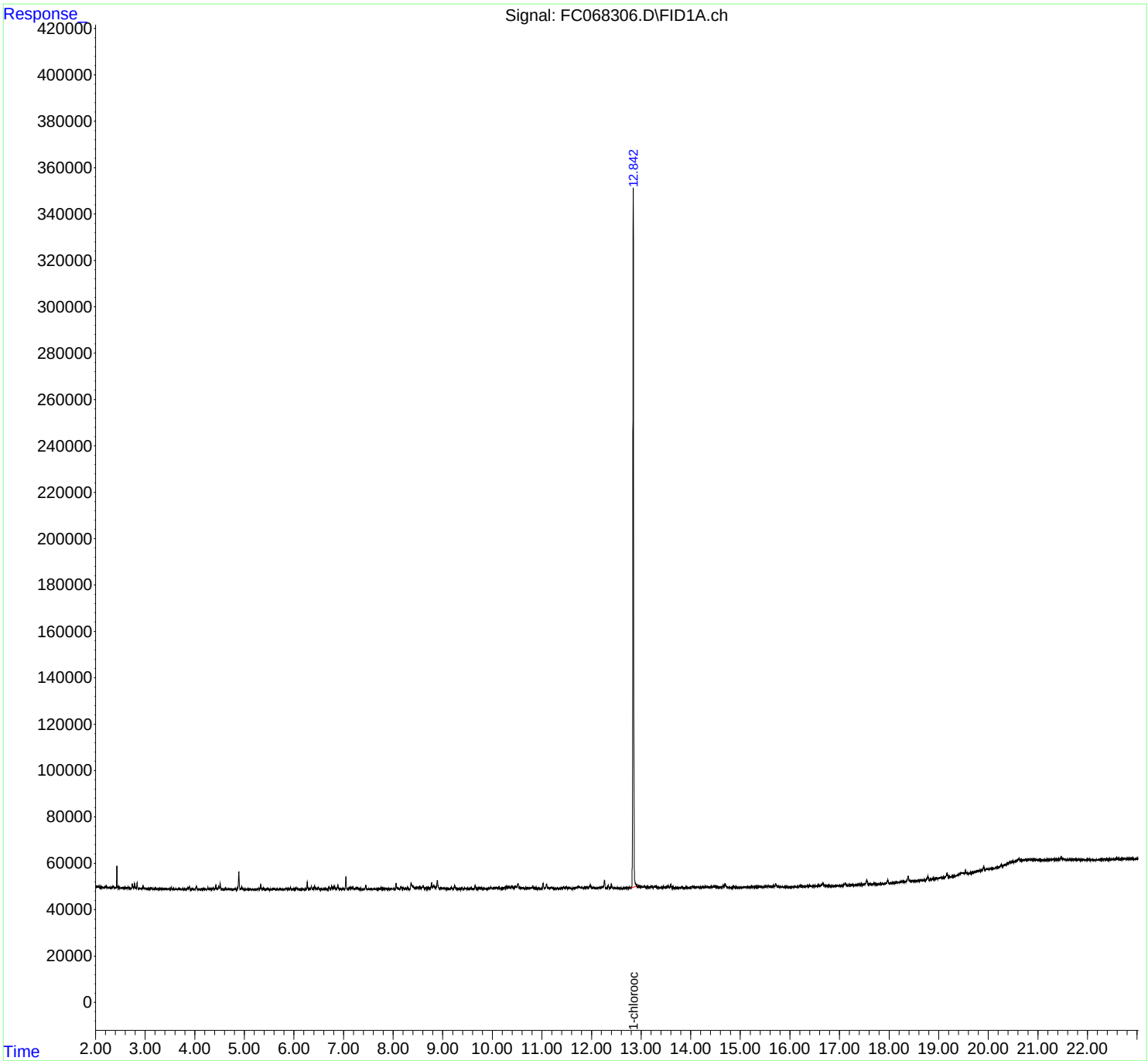
Quantitation Report (QT Reviewed)

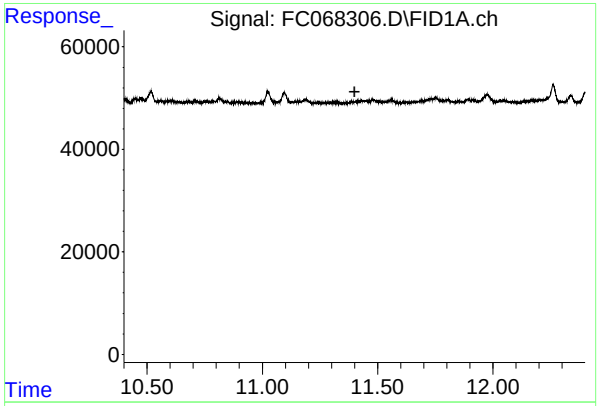
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022725AL\
Data File : FC068306.D
Signal(s) : FID1A.ch
Acq On : 27 Feb 2025 10:26
Operator : YP/AJ
Sample : PB166883BL
Misc :
ALS Vial : 11 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
PB166883BL

Integration File: autoint1.e
Quant Time: Mar 05 04:43:16 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

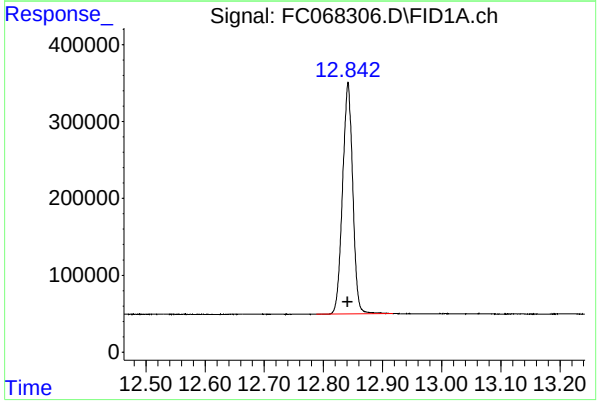





#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.400 min
Response: 0
Conc: N.D.

**Instrument :**
FID_C
**ClientSampleId :**
PB166883BL




#12 1-chlorooctadecane (SURR)

R.T.: 12.842 min
Delta R.T.: 0.000 min
Response: 3594009
Conc: 31.95 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022725AL\
Data File : FC068306.D
Signal(s) : FID1A.ch
Acq On : 27 Feb 2025 10:26
Sample : PB166883BL
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Title : GC Extractables

Signal : FID1A.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 12.842 | 12.788 | 12.918 | BB | 298386 | 3594009 | 100.00% | 100.000% |
| | | | Sum of corrected areas: | | | 3594009 | | |

Aliphatic EPH 021125.M Fri Feb 28 01:08:09 2025

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

# Report of Analysis

| | | | | | |
|---|---|---|---|---|---|
| Client: | Weston Solutions, Inc. | | Date Collected: | | |
| Project: | RFP 905 | | Date Received: | | |
| Client Sample ID: | PB166883BL | | SDG No.: | Q1421 | |
| Lab Sample ID: | PB166883BL | | Matrix: | Water | |
| Analytical Method: | NJEPH | | % Solid: | 0 | |
| Sample Wt/Vol: | 1000 | Units: mL | Final Vol: | 2000 | uL |
| Soil Aliquot Vol: | | uL | Test: | EPH | |
| Prep Method : | SW3510 | | | | |

| File ID : | Dilution: | Prep Date : | Date Analyzed : | Prep Batch ID |
|---|---|---|---|---|
| FD049115.D | 1 | 02/26/25 | 02/27/25 | PB166883 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| Aromatic C10-C12 | Aromatic C10-C12 | 3.32 | U | 3.32 | 20.0 | ug/l |
| Aromatic C12-C16 | Aromatic C12-C16 | 3.69 | U | 3.69 | 30.0 | ug/l |
| Aromatic C16-C21 | Aromatic C16-C21 | 12.7 | U | 12.7 | 50.0 | ug/l |
| Aromatic C21-C36 | Aromatic C21-C36 | 25.2 | U | 25.2 | 80.0 | ug/l |
| **SURROGATES** | | | | | | |
| 580-13-2 | 2-Bromonaphthalene (SURR) | 55.3 | | 40 - 140 | 111% | SPK: 50 |
| 321-60-8 | 2-Flurobiphenyl (SURR) | 56.2 | | 40 - 140 | 112% | SPK: 50 |
| 84-15-1 | ortho-Terphenyl (SURR) | 49.2 | | 40 - 140 | 98% | SPK: 50 |

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# Quantitation Report For Aromatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | PB166883BL | Acq On: | 27 Feb 2025 10:26 |
| Client Sample ID: | PB166883BL | Operator: | YP/AJ |
| Data file: | FD049115.D | Misc: | |
| Instrument: | FID_D | ALS Vial: | 61 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aromatic C10-C12 | 4.076 | 5.794 | 0 | 0 | 200 | ug/ml |
| Aromatic C12-C16 | 5.795 | 8.397 | 0 | 0 | 300 | ug/ml |
| Aromatic C16-C21 | 8.398 | 12.661 | 0 | 0 | 500 | ug/ml |
| Aromatic C21-C36 | 12.662 | 18.071 | 0 | 0 | 800 | ug/ml |
| Aromatic EPH | 4.076 | 18.071 | 0 | 0 | | ug/ml |
| 2-Bromonaphthalene (SURR) | 7.348 | 7.348 | 7914407 | 55.3 | | ug/ml |
| 2-Flurobiphenyl (SURR) | 8.198 | 8.198 | 4940373 | 56.2 | | ug/ml |
| ortho-Terphenyl (SURR) | 11.235 | 11.235 | 7954591 | 49.17 | | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022725AR\
Data File : FD049115.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2025 10:26
Operator : YP/AJ
Sample : PB166883BL
Misc :
ALS Vial : 61 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
PB166883BL

Integration File: autoint1.e
Quant Time: Feb 28 01:25:25 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

| Compound | R.T. | Response | Conc Units |
|---|---|---|---|
| System Monitoring Compounds | | | |
| 4) S 2-Bromonaphthalene (S... | 7.348 | 7914407 | 55.303 ug/ml |
| Spiked Amount 50.000 | | Recovery = 110.61% | |
| 6) S 2-Flurobiphenyl (SURR) | 8.198 | 4940373 | 56.197 ug/ml |
| Spiked Amount 50.000 Range 0 - 131 | | Recovery = 112.39% | |
| 11) S ortho-Terphenyl (SURR) | 11.235 | 7954591 | 49.171 ug/ml |
| Spiked Amount 50.000 | | Recovery = 98.34% | |
| Target Compounds | | | |

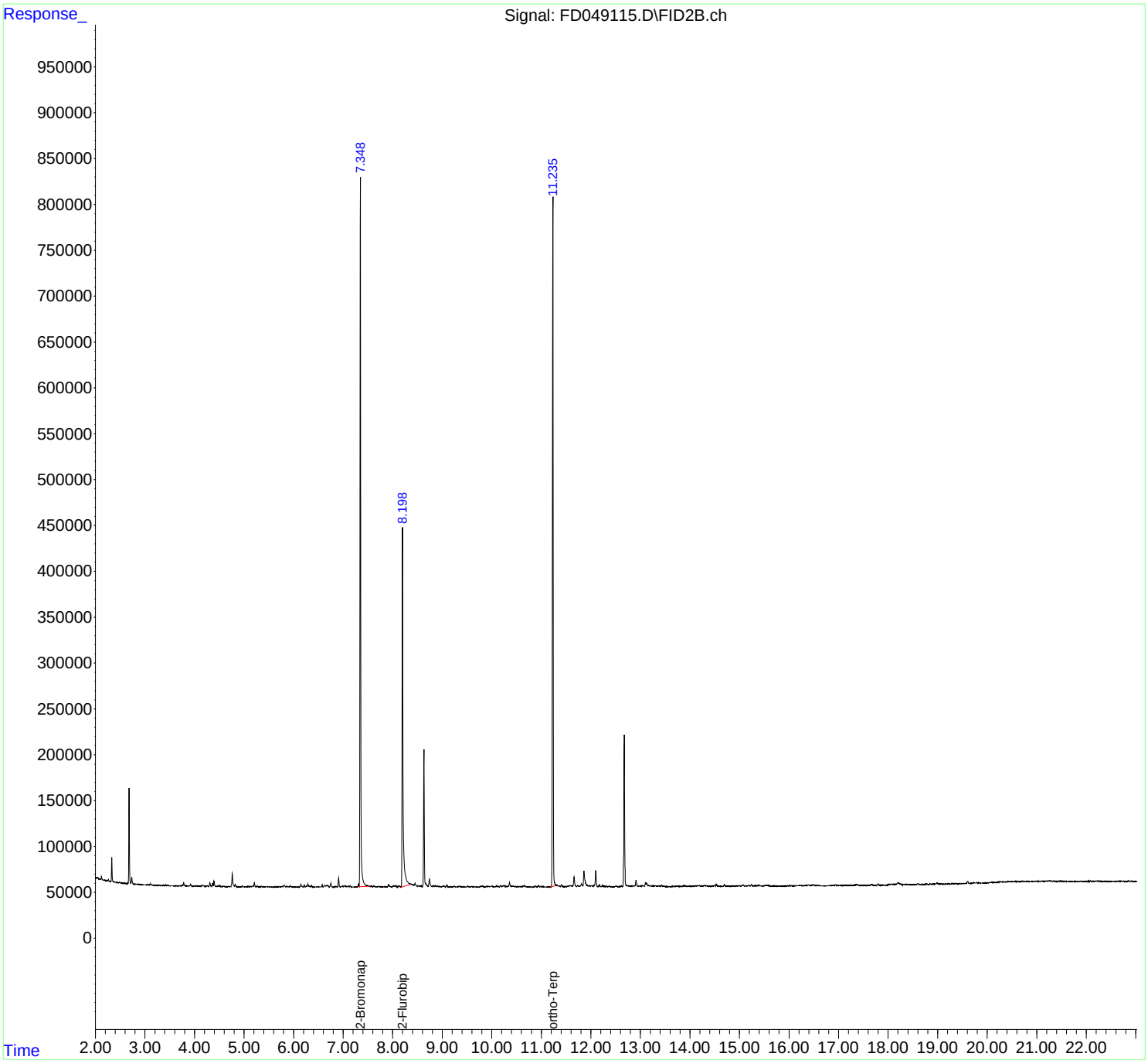
(f)=RT Delta > 1/2 Window (m)=manual int.

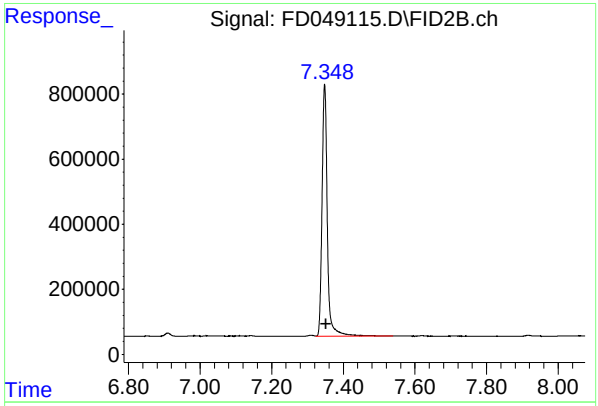
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022725AR\
Data File : FD049115.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2025 10:26
Operator : YP/AJ
Sample : PB166883BL
Misc :
ALS Vial : 61 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
PB166883BL

Integration File: autoint1.e
Quant Time: Feb 28 01:25:25 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

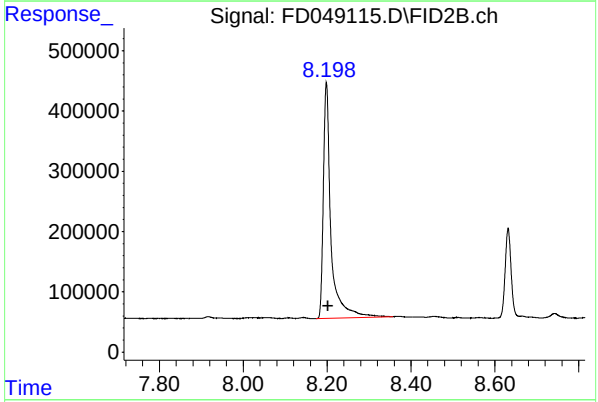





#4 2-Bromonaphthalene (SURR)

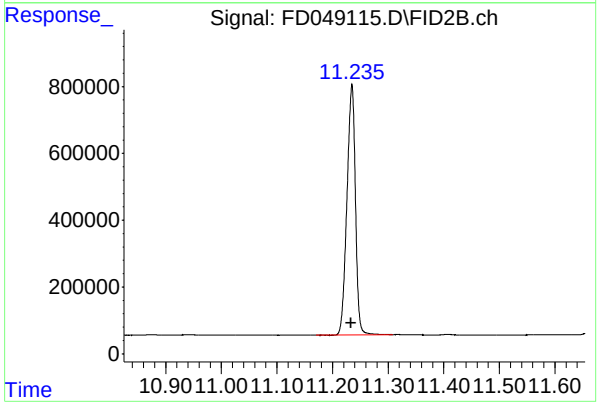
R.T.: 7.348 min
Delta R.T.: -0.003 min
Response: 7914407
Conc: 55.30 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
PB166883BL




#6 2-Flurobiphenyl (SURR)

R.T.: 8.198 min
Delta R.T.: -0.004 min
Response: 4940373
Conc: 56.20 ug/ml




#11 ortho-Terphenyl (SURR)

R.T.: 11.235 min
Delta R.T.: 0.002 min
Response: 7954591
Conc: 49.17 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022725AR\
Data File : FD049115.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2025 10:26
Sample : PB166883BL
Misc :
ALS Vial : 61 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Title : GC Extractables

Signal : FID2B.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 7.348 | 7.324 | 7.539 | VB | 773170 | 7914407 | 99.49% | 38.033% |
| 2 | 8.198 | 8.174 | 8.357 | BV | 391513 | 4940373 | 62.11% | 23.741% |
| 3 | 11.235 | 11.170 | 11.309 | BV | 752234 | 7954591 | 100.00% | 38.226% |
| | | | Sum of corrected areas: | | | 20809371 | | |

Aromatic EPH 021125.M Fri Feb 28 01:56:26 2025

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Weston Solutions, Inc. | Date Collected: | |
| Project: | RFP 905 | Date Received: | |
| Client Sample ID: | PB166923BL | SDG No.: | Q1421 |
| Lab Sample ID: | PB166923BL | Matrix: | Solid |
| Analytical Method: | NJEPH | % Solid: | 100 |
| Sample Wt/Vol: | 30.02 Units: g | Final Vol: | 2000 uL |
| Soil Aliquot Vol: | uL | Test: | EPH |
| Prep Method : | | | |

| Prep Date : | Date Analyzed : | Prep Batch ID |
|---|---|---|
| 02/27/25 13:10 | 02/28/25 11:00 | PB166923 |

| CAS Number | Parameter | Conc. | Qualifier | Dilution | MDL | LOQ / CRQL | Units(Dry Weight) | Datafile |
|---|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | | |
| Aliphatic C9-C12 | Aliphatic C9-C12 | 0.38 | U | 1 | 0.38 | 1.00 | mg/kg | FC068322.D |
| Aliphatic C12-C16 | Aliphatic C12-C16 | 0.24 | U | 1 | 0.24 | 0.67 | mg/kg | FC068322.D |
| Aliphatic C16-C21 | Aliphatic C16-C21 | 0.30 | U | 1 | 0.30 | 1.00 | mg/kg | FC068322.D |
| Aliphatic C21-C28 | Aliphatic C21-C28 | 0.80 | U | 1 | 0.80 | 1.33 | mg/kg | FC068322.D |
| Aliphatic C28-C40 | Aliphatic C28-C40 | 1.80 | U | 1 | 1.80 | 2.00 | mg/kg | FC068322.D |
| Aromatic C10-C12 | Aromatic C10-C12 | 0.30 | U | 1 | 0.30 | 0.67 | mg/kg | FD049130.D |
| Aromatic C12-C16 | Aromatic C12-C16 | 0.34 | U | 1 | 0.34 | 1.00 | mg/kg | FD049130.D |
| Aromatic C16-C21 | Aromatic C16-C21 | 0.96 | U | 1 | 0.96 | 1.67 | mg/kg | FD049130.D |
| Aromatic C21-C36 | Aromatic C21-C36 | 2.00 | U | 1 | 2.00 | 2.66 | mg/kg | FD049130.D |
| Total AliphaticEPH | Total AliphaticEPH | 3.52 | U | | 3.52 | 5.99 | mg/kg | |
| Total AromaticEPH | Total AromaticEPH | 3.60 | U | | 3.60 | 6.00 | mg/kg | |
| Total EPH | Total EPH | 7.12 | U | | 7.12 | 12.0 | mg/kg | |

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control 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

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

# Report of Analysis

| | | | | | |
|---|---|---|---|---|---|
| Client: | Weston Solutions, Inc. | | Date Collected: | | |
| Project: | RFP 905 | | Date Received: | | |
| Client Sample ID: | PB166923BL | | SDG No.: | Q1421 | |
| Lab Sample ID: | PB166923BL | | Matrix: | Solid | |
| Analytical Method: | NJEPH | | % Solid: | 100 | |
| Sample Wt/Vol: | 30.02 | Units: g | Final Vol: | 2000 | uL |
| Soil Aliquot Vol: | | uL | Test: | EPH | |
| Prep Method : | | | | | |

| File ID : | Dilution: | Prep Date : | Date Analyzed : | Prep Batch ID |
|---|---|---|---|---|
| FC068322.D | 1 | 02/27/25 | 02/28/25 | PB166923 |

| CAS Number | Parameter | | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | |
| Aliphatic C9-C12 | Aliphatic C9-C12 | | 0.38 | U | 0.38 | 1.00 | mg/kg |
| Aliphatic C12-C16 | Aliphatic C12-C16 | | 0.24 | U | 0.24 | 0.67 | mg/kg |
| Aliphatic C16-C21 | Aliphatic C16-C21 | | 0.30 | U | 0.30 | 1.00 | mg/kg |
| Aliphatic C21-C28 | Aliphatic C21-C28 | | 0.80 | U | 0.80 | 1.33 | mg/kg |
| Aliphatic C28-C40 | Aliphatic C28-C40 | | 1.80 | U | 1.80 | 2.00 | mg/kg |
| **SURROGATES** | | | | | | | |
| 3383-33-2 | 1-chlorooctadecane (SURR) | | 41.6 | | 40 - 140 | 83% | SPK: 50 |
| 84-15-1 | ortho-Terphenyl (SURR) | | 0.00 | | 40 - 140 | 0% | SPK: 50 |

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

# Quantitation Report For Aliphatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | PB166923BL | Acq On: | 28 Feb 2025 11:00 |
| Client Sample ID: | PB166923BL | Operator: | YP/AJ |
| Data file: | FC068322.D | Misc: | |
| Instrument: | FID_C | ALS Vial: | 11 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aliphatic C9-C12 | 3.104 | 6.369 | 0 | 0 | 300 | ug/ml |
| Aliphatic C12-C16 | 6.370 | 9.754 | 0 | 0 | 200 | ug/ml |
| Aliphatic C16-C21 | 9.755 | 13.107 | 0 | 0 | 300 | ug/ml |
| Aliphatic C21-C28 | 13.108 | 16.761 | 0 | 0 | 400 | ug/ml |
| Aliphatic C28-C40 | 16.762 | 21.565 | 0 | 0 | 600 | ug/ml |
| Aliphatic EPH | 3.104 | 21.565 | 0 | 0 | | ug/ml |
| ortho-Terphenyl (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |
| 1-chlorooctadecane (SURR) | 12.840 | 12.840 | 4680251 | 41.61 | | ug/ml |
| Aliphatic C9-C28 | 3.104 | 16.761 | 0 | 0 | 1200 | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022825AL\
Data File : FC068322.D
Signal(s) : FID1A.ch
Acq On : 28 Feb 2025 11:00
Operator : YP/AJ
Sample : PB166923BL
Misc :
ALS Vial : 11 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
PB166923BL

Integration File: autoint1.e
Quant Time: Mar 05 05:22:57 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

| Compound | R.T. | Response | Conc Units |
|---|---|---|---|
| System Monitoring Compounds | | | |
| 12) S 1-chlorooctadecane (S... | 12.840 | 4680251 | 41.612 ug/ml |
| Spiked Amount 50.000 | | Recovery = 83.22% | |
| Target Compounds | | | |

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

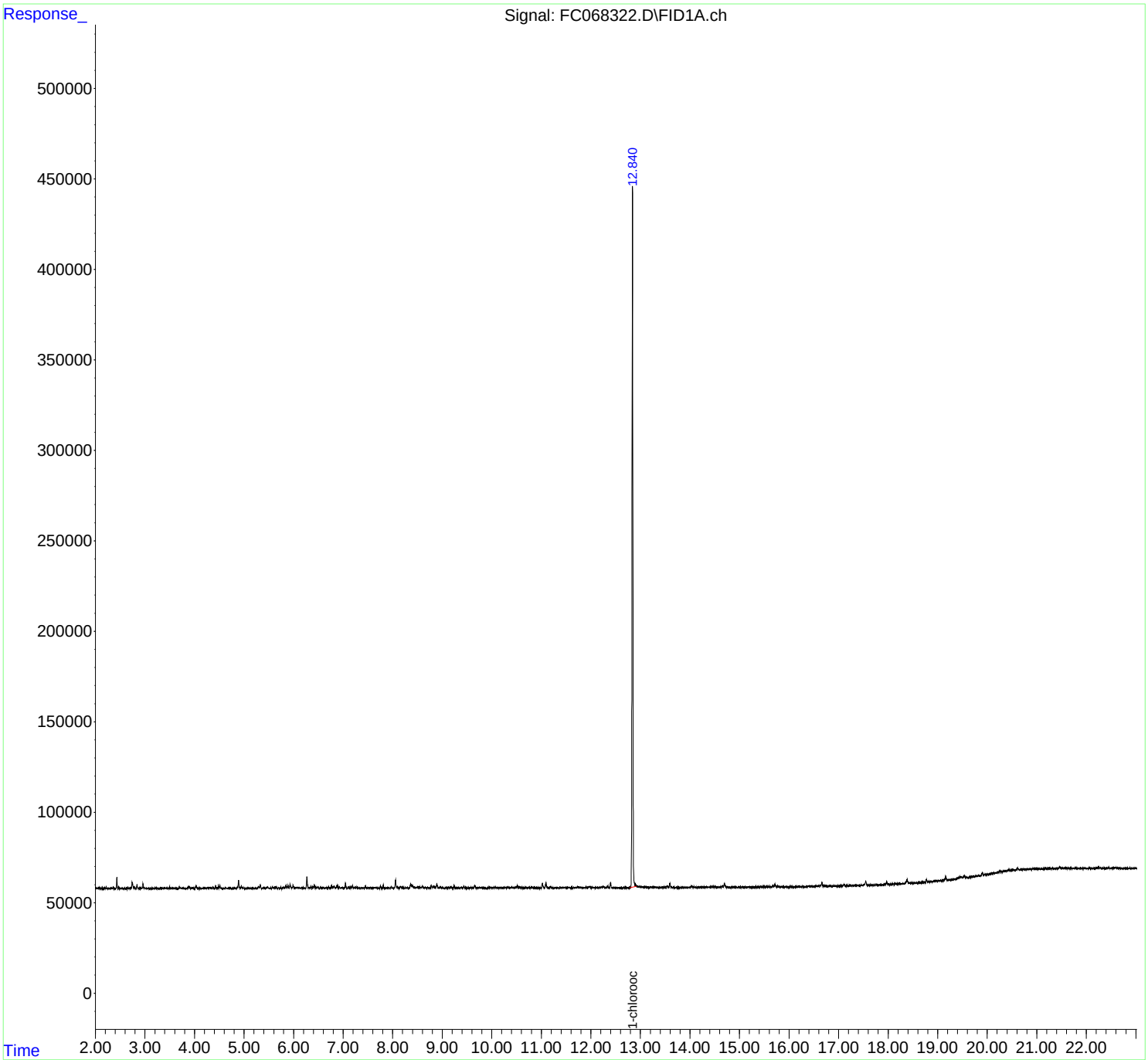
Quantitation Report (QT Reviewed)

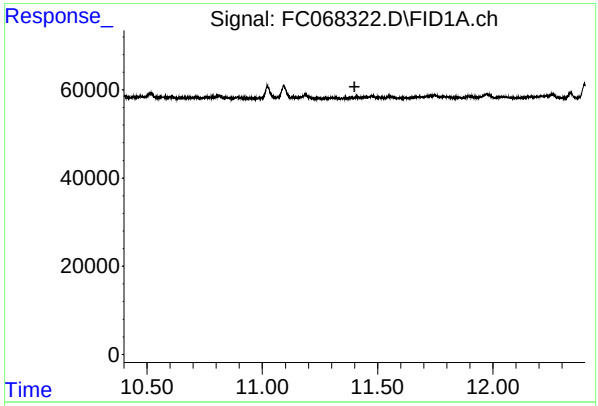
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022825AL\
Data File : FC068322.D
Signal(s) : FID1A.ch
Acq On : 28 Feb 2025 11:00
Operator : YP/AJ
Sample : PB166923BL
Misc :
ALS Vial : 11 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
PB166923BL

Integration File: autoint1.e
Quant Time: Mar 05 05:22:57 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

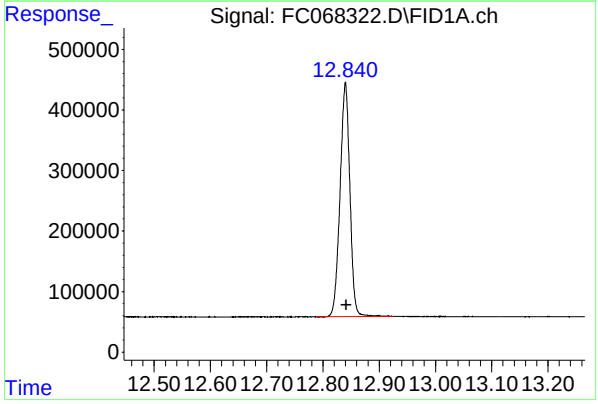





#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.400 min
Response: 0
Conc: N.D.

**Instrument :**
FID_C
**ClientSampleId :**
PB166923BL




#12 1-chlorooctadecane (SURR)

R.T.: 12.840 min
Delta R.T.: -0.002 min
Response: 4680251
Conc: 41.61 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022825AL\
Data File : FC068322.D
Signal(s) : FID1A.ch
Acq On : 28 Feb 2025 11:00
Sample : PB166923BL
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Title : GC Extractables

Signal : FID1A.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 12.840 | 12.788 | 12.925 | BB | 386372 | 4680251 | 100.00% | 100.000% |
| | | | Sum of corrected areas: | | | 4680251 | | |

Aliphatic EPH 021125.M Sat Mar 01 01:22:54 2025

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

# Report of Analysis

| | | | | | |
|---|---|---|---|---|---|
| Client: | Weston Solutions, Inc. | | Date Collected: | | |
| Project: | RFP 905 | | Date Received: | | |
| Client Sample ID: | PB166923BL | | SDG No.: | Q1421 | |
| Lab Sample ID: | PB166923BL | | Matrix: | Solid | |
| Analytical Method: | NJEPH | | % Solid: | 100 | |
| Sample Wt/Vol: | 30.02 | Units: g | Final Vol: | 2000 | uL |
| Soil Aliquot Vol: | | uL | Test: | EPH | |
| Prep Method : | | | | | |

| File ID : | Dilution: | Prep Date : | Date Analyzed : | Prep Batch ID |
|---|---|---|---|---|
| FD049130.D | 1 | 02/27/25 | 02/28/25 | PB166923 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| Aromatic C10-C12 | Aromatic C10-C12 | 0.30 | U | 0.30 | 0.67 | mg/kg |
| Aromatic C12-C16 | Aromatic C12-C16 | 0.34 | U | 0.34 | 1.00 | mg/kg |
| Aromatic C16-C21 | Aromatic C16-C21 | 0.96 | U | 0.96 | 1.67 | mg/kg |
| Aromatic C21-C36 | Aromatic C21-C36 | 2.00 | U | 2.00 | 2.66 | mg/kg |
| **SURROGATES** | | | | | | |
| 580-13-2 | 2-Bromonaphthalene (SURR) | 56.0 | | 40 - 140 | 112% | SPK: 50 |
| 321-60-8 | 2-Flurobiphenyl (SURR) | 57.8 | | 40 - 140 | 116% | SPK: 50 |
| 84-15-1 | ortho-Terphenyl (SURR) | 49.7 | | 40 - 140 | 99% | SPK: 50 |

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# Quantitation Report For Aromatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | PB166923BL | Acq On: | 28 Feb 2025 11:00 |
| Client Sample ID: | PB166923BL | Operator: | YP/AJ |
| Data file: | FD049130.D | Misc: | |
| Instrument: | FID_D | ALS Vial: | 61 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aromatic C10-C12 | 4.076 | 5.794 | 0 | 0 | 200 | ug/ml |
| Aromatic C12-C16 | 5.795 | 8.396 | 0 | 0 | 300 | ug/ml |
| Aromatic C16-C21 | 8.397 | 12.661 | 0 | 0 | 500 | ug/ml |
| Aromatic C21-C36 | 12.662 | 18.073 | 0 | 0 | 800 | ug/ml |
| Aromatic EPH | 4.076 | 18.073 | 0 | 0 | | ug/ml |
| ortho-Terphenyl (SURR) | 11.236 | 11.236 | 8041222 | 49.71 | | ug/ml |
| 2-Bromonaphthalene (SURR) | 7.352 | 7.352 | 8010402 | 55.97 | | ug/ml |
| 2-Flurobiphenyl (SURR) | 8.201 | 8.201 | 5081253 | 57.8 | | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022825AR\
Data File : FD049130.D
Signal(s) : FID2B.ch
Acq On : 28 Feb 2025 11:00
Operator : YP/AJ
Sample : PB166923BL
Misc :
ALS Vial : 61 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
PB166923BL

Integration File: autoint1.e
Quant Time: Mar 01 02:16:49 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

| Compound | R.T. | Response | Conc Units |
|---|---|---|---|
| **System Monitoring Compounds** | | | |
| 4) S 2-Bromonaphthalene (S... | 7.352 | 8010402 | 55.974 ug/ml |
| Spiked Amount 50.000 | | Recovery = 111.95% | |
| 6) S 2-Flurobiphenyl (SURR) | 8.201 | 5081253 | 57.799 ug/ml |
| Spiked Amount 50.000 Range 0 - 131 | | Recovery = 115.60% | |
| 11) S ortho-Terphenyl (SURR) | 11.236 | 8041222 | 49.706 ug/ml |
| Spiked Amount 50.000 | | Recovery = 99.41% | |
| **Target Compounds** | | | |

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

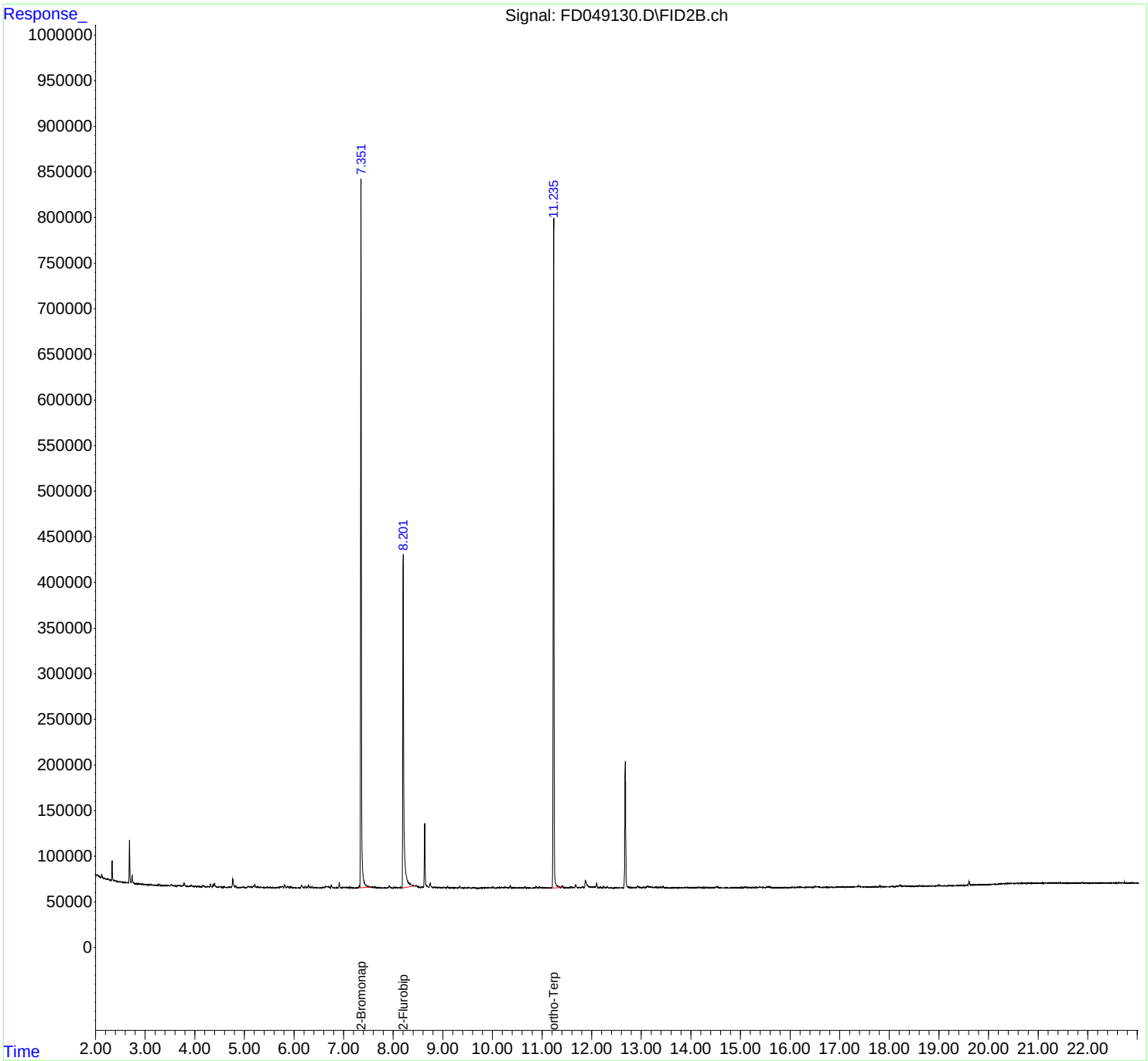
Quantitation Report (QT Reviewed)

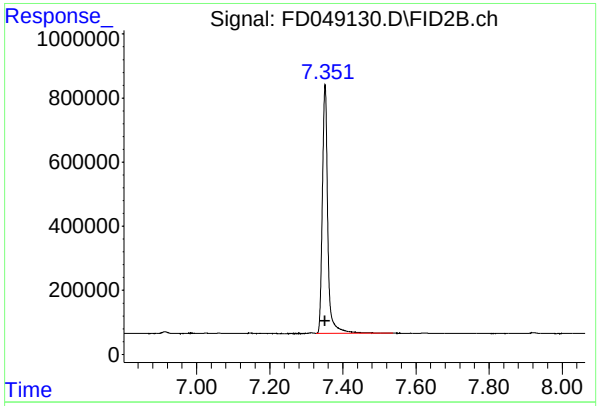
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022825AR\
Data File : FD049130.D
Signal(s) : FID2B.ch
Acq On : 28 Feb 2025 11:00
Operator : YP/AJ
Sample : PB166923BL
Misc :
ALS Vial : 61 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
PB166923BL

Integration File: autoint1.e
Quant Time: Mar 01 02:16:49 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

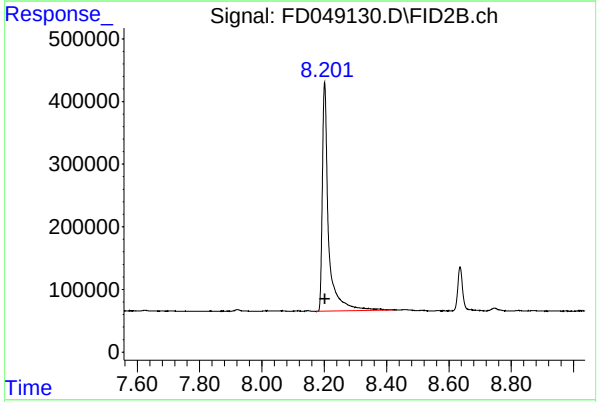





#4 2-Bromonaphthalene (SURR)

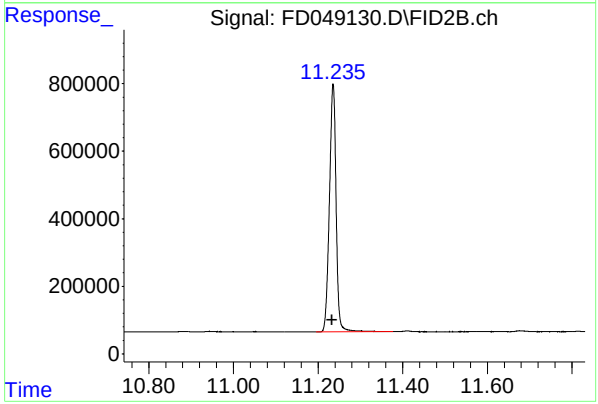
R.T.: 7.352 min
Delta R.T.: 0.000 min
Response: 8010402
Conc: 55.97 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
PB166923BL




#6 2-Flurobiphenyl (SURR)

R.T.: 8.201 min
Delta R.T.: 0.000 min
Response: 5081253
Conc: 57.80 ug/ml




#11 ortho-Terphenyl (SURR)

R.T.: 11.236 min
Delta R.T.: 0.002 min
Response: 8041222
Conc: 49.71 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022825AR\
Data File : FD049130.D
Signal(s) : FID2B.ch
Acq On : 28 Feb 2025 11:00
Sample : PB166923BL
Misc :
ALS Vial : 61 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Title : GC Extractables

Signal : FID2B.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 7.352 | 7.327 | 7.537 | VB | 776735 | 8010402 | 99.62% | 37.905% |
| 2 | 8.201 | 8.174 | 8.420 | PB | 364991 | 5081253 | 63.19% | 24.044% |
| 3 | 11.236 | 11.195 | 11.377 | BB | 734702 | 8041222 | 100.00% | 38.051% |
| | | | Sum of corrected areas: | | | 21132876 | | |

Aromatic EPH 021125.M Sat Mar 01 03:51:24 2025

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

# Quantitation Report For Aliphatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | I.BLK | Acq On: | 10 Feb 2025 15:48 |
| Client Sample ID: | I.BLK | Operator: | YP/AJ |
| Data file: | FC068251.D | Misc: | |
| Instrument: | FID_C | ALS Vial: | 1 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aliphatic C9-C12 | 3.107 | 6.373 | 0 | 0 | 300 | ug/ml |
| Aliphatic C12-C16 | 6.374 | 9.756 | 0 | 0 | 200 | ug/ml |
| Aliphatic C16-C21 | 9.757 | 13.110 | 0 | 0 | 300 | ug/ml |
| Aliphatic C21-C28 | 13.111 | 16.762 | 0 | 0 | 400 | ug/ml |
| Aliphatic C28-C40 | 16.763 | 21.563 | 0 | 0 | 600 | ug/ml |
| Aliphatic EPH | 3.107 | 21.563 | 0 | 0 | | ug/ml |
| ortho-Terphenyl (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |
| 1-chlorooctadecane (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |
| Aliphatic C9-C28 | 3.107 | 16.762 | 0 | 0 | 1200 | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC021125AL\
Data File : FC068251.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2025 15:48
Operator : YP/AJ
Sample : I.BLK
Misc :
ALS Vial : 1 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
I.BLK

Integration File: autoint1.e
Quant Time: Feb 11 02:33:27 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Tue Feb 11 02:29:33 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

| Compound | R.T. | Response | Conc | Units |
|---|---|---|---|---|

System Monitoring Compounds

Target Compounds

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

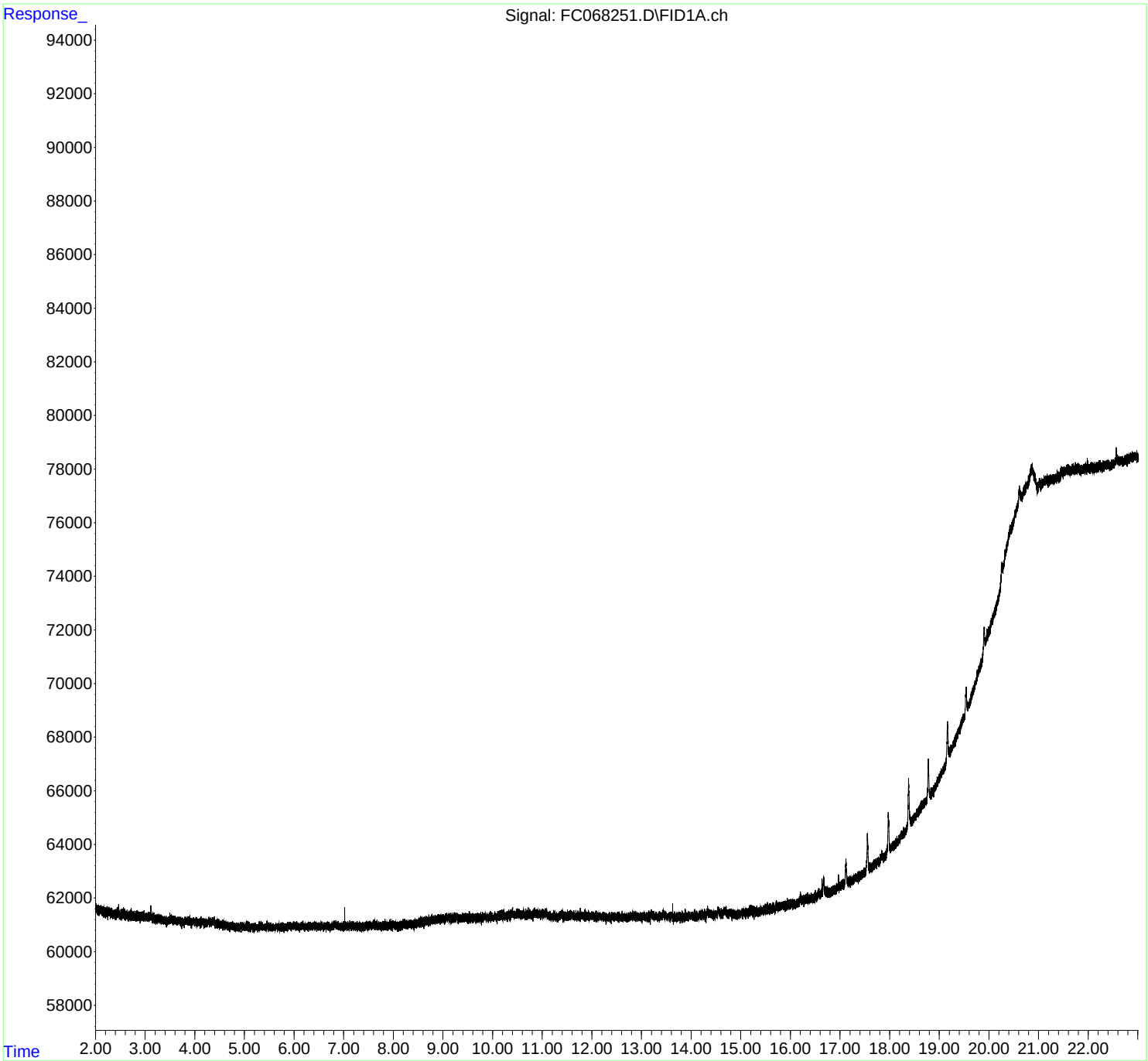
Quantitation Report (QT Reviewed)

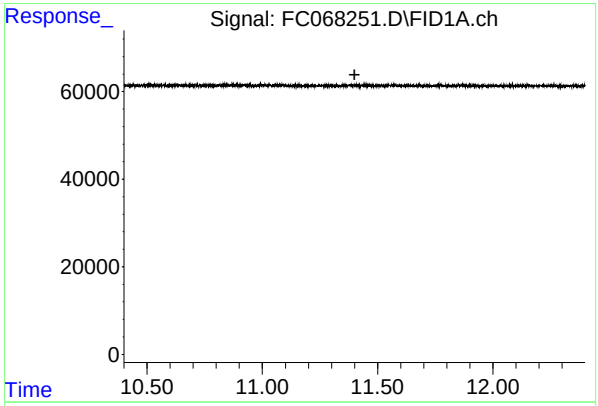
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC021125AL\
Data File : FC068251.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2025 15:48
Operator : YP/AJ
Sample : I.BLK
Misc :
ALS Vial : 1 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
I.BLK

Integration File: autoint1.e
Quant Time: Feb 11 02:33:27 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Tue Feb 11 02:29:33 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

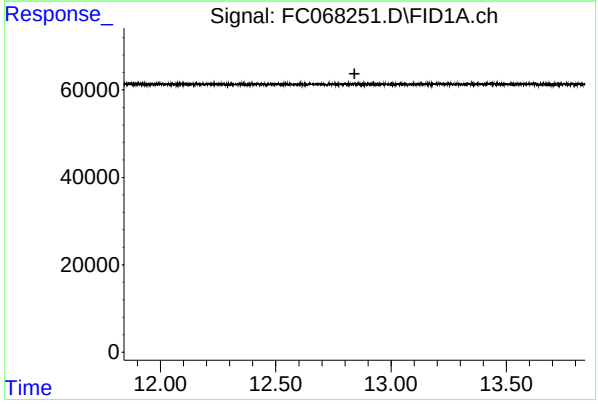





#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.400 min
Response: 0
Conc: N.D.

**Instrument :**
FID_C
**ClientSampleId :**
I.BLK




#12 1-chlorooctadecane (SURR)

R.T.: 0.000 min
Exp R.T. : 12.842 min
Response: 0
Conc: N.D.

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC021125AL\
Data File : FC068251.D
Signal(s) : FID1A.ch
Acq On : 10 Feb 2025 15:48
Sample : I.BLK
Misc :
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Title : GC Extractables

Signal : FID1A.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|

No peaks were detected!

Aliphatic EPH 021125.M Tue Feb 11 02:38:40 2025

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

# Quantitation Report For Aliphatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | I.BLK | Acq On: | 27 Feb 2025 07:22 |
| Client Sample ID: | I.BLK | Operator: | YP/AJ |
| Data file: | FC068304.D | Misc: | |
| Instrument: | FID_C | ALS Vial: | 1 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aliphatic C9-C12 | 3.104 | 6.370 | 0 | 0 | 300 | ug/ml |
| Aliphatic C12-C16 | 6.371 | 9.754 | 0 | 0 | 200 | ug/ml |
| Aliphatic C16-C21 | 9.755 | 13.108 | 0 | 0 | 300 | ug/ml |
| Aliphatic C21-C28 | 13.109 | 16.762 | 0 | 0 | 400 | ug/ml |
| Aliphatic C28-C40 | 16.763 | 21.566 | 0 | 0 | 600 | ug/ml |
| Aliphatic EPH | 3.104 | 21.566 | 0 | 0 | | ug/ml |
| ortho-Terphenyl (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |
| 1-chlorooctadecane (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |
| Aliphatic C9-C28 | 3.104 | 16.762 | 0 | 0 | 1200 | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022725AL\
Data File : FC068304.D
Signal(s) : FID1A.ch
Acq On : 27 Feb 2025 07:22
Operator : YP/AJ
Sample : I.BLK
Misc :
ALS Vial : 1 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
I.BLK

Integration File: autoint1.e
Quant Time: Feb 28 00:23:06 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:52:40 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

| Compound | R.T. | Response | Conc | Units |
|---|---|---|---|---|

System Monitoring Compounds

Target Compounds

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

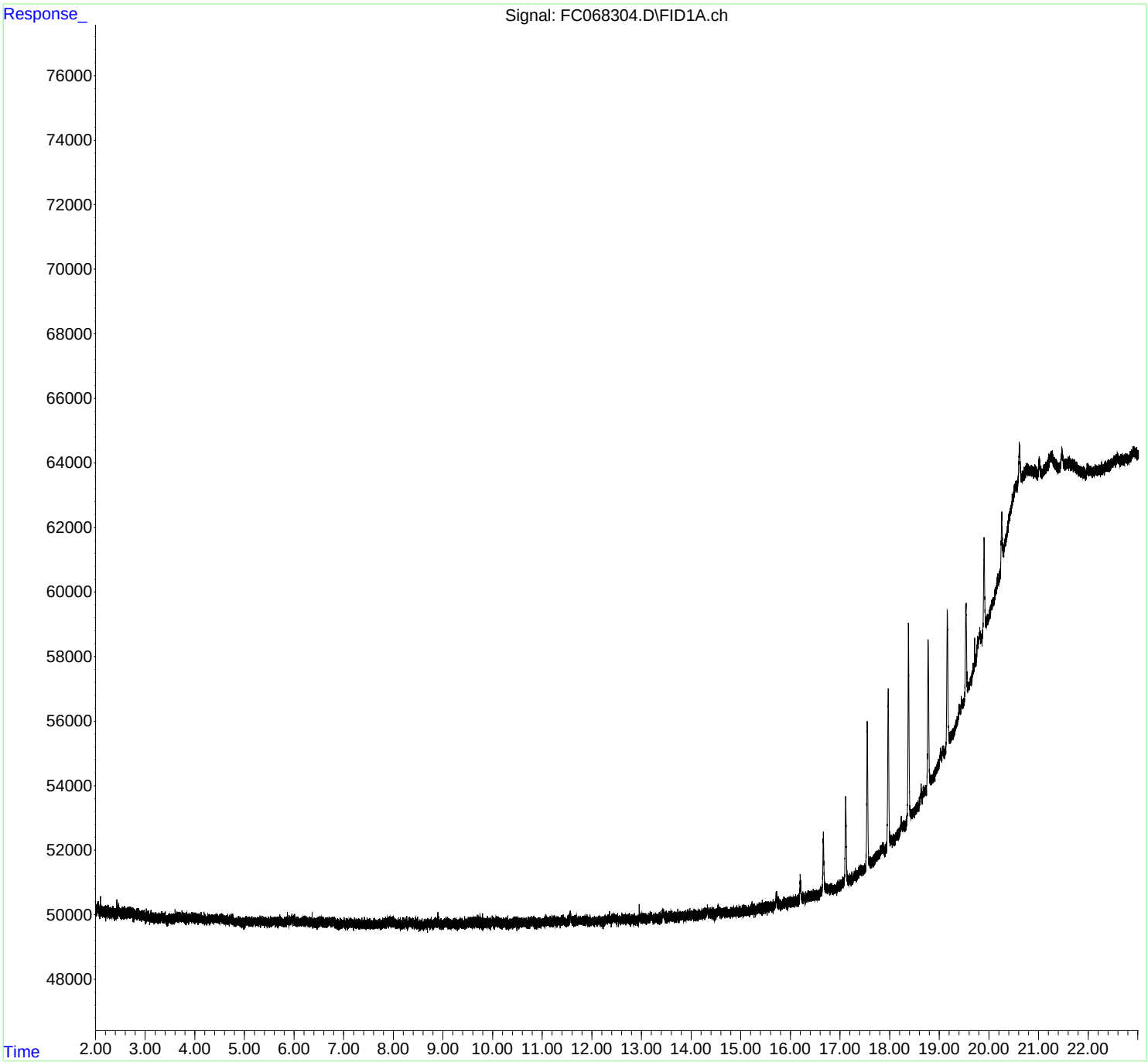
Quantitation Report (QT Reviewed)

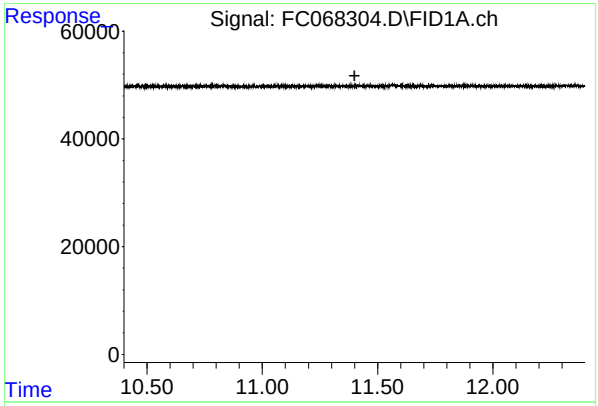
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022725AL\
Data File : FC068304.D
Signal(s) : FID1A.ch
Acq On : 27 Feb 2025 07:22
Operator : YP/AJ
Sample : I.BLK
Misc :
ALS Vial : 1 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
I.BLK

Integration File: autoint1.e
Quant Time: Feb 28 00:23:06 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:52:40 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

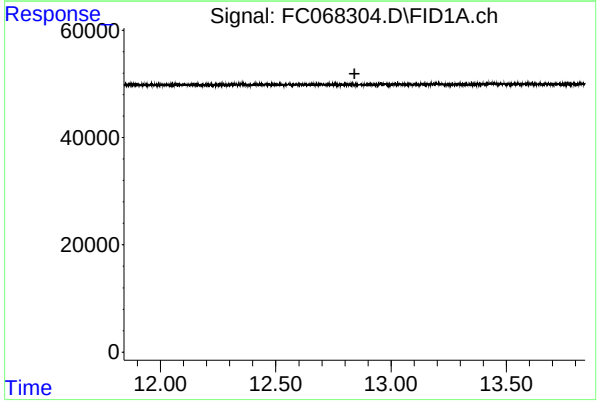





#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.400 min
Response: 0
Conc: N.D.

**Instrument :**
FID_C
**ClientSampleId :**
I.BLK




#12 1-chlorooctadecane (SURR)

R.T.: 0.000 min
Exp R.T. : 12.842 min
Response: 0
Conc: N.D.

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022725AL\
Data File : FC068304.D
Signal(s) : FID1A.ch
Acq On : 27 Feb 2025 07:22
Sample : I.BLK
Misc :
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Title : GC Extractables

Signal : FID1A.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|

No peaks were detected!

Aliphatic EPH 021125.M Fri Feb 28 01:07:38 2025

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

# Quantitation Report For Aliphatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | I.BLK | Acq On: | 27 Feb 2025 12:50 |
| Client Sample ID: | I.BLK | Operator: | YP/AJ |
| Data file: | FC068310.D | Misc: | |
| Instrument: | FID_C | ALS Vial: | 1 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aliphatic C9-C12 | 3.104 | 6.370 | 0 | 0 | 300 | ug/ml |
| Aliphatic C12-C16 | 6.371 | 9.754 | 0 | 0 | 200 | ug/ml |
| Aliphatic C16-C21 | 9.755 | 13.108 | 0 | 0 | 300 | ug/ml |
| Aliphatic C21-C28 | 13.109 | 16.762 | 0 | 0 | 400 | ug/ml |
| Aliphatic C28-C40 | 16.763 | 21.566 | 0 | 0 | 600 | ug/ml |
| Aliphatic EPH | 3.104 | 21.566 | 0 | 0 | | ug/ml |
| ortho-Terphenyl (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |
| 1-chlorooctadecane (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |
| Aliphatic C9-C28 | 3.104 | 16.762 | 0 | 0 | 1200 | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022725AL\
Data File : FC068310.D
Signal(s) : FID1A.ch
Acq On : 27 Feb 2025 12:50
Operator : YP/AJ
Sample : I.BLK
Misc :
ALS Vial : 1 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
I.BLK

Integration File: autoint1.e
Quant Time: Feb 28 00:25:28 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:52:40 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

| Compound | R.T. | Response | Conc | Units |
|---|---|---|---|---|

System Monitoring Compounds

Target Compounds

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

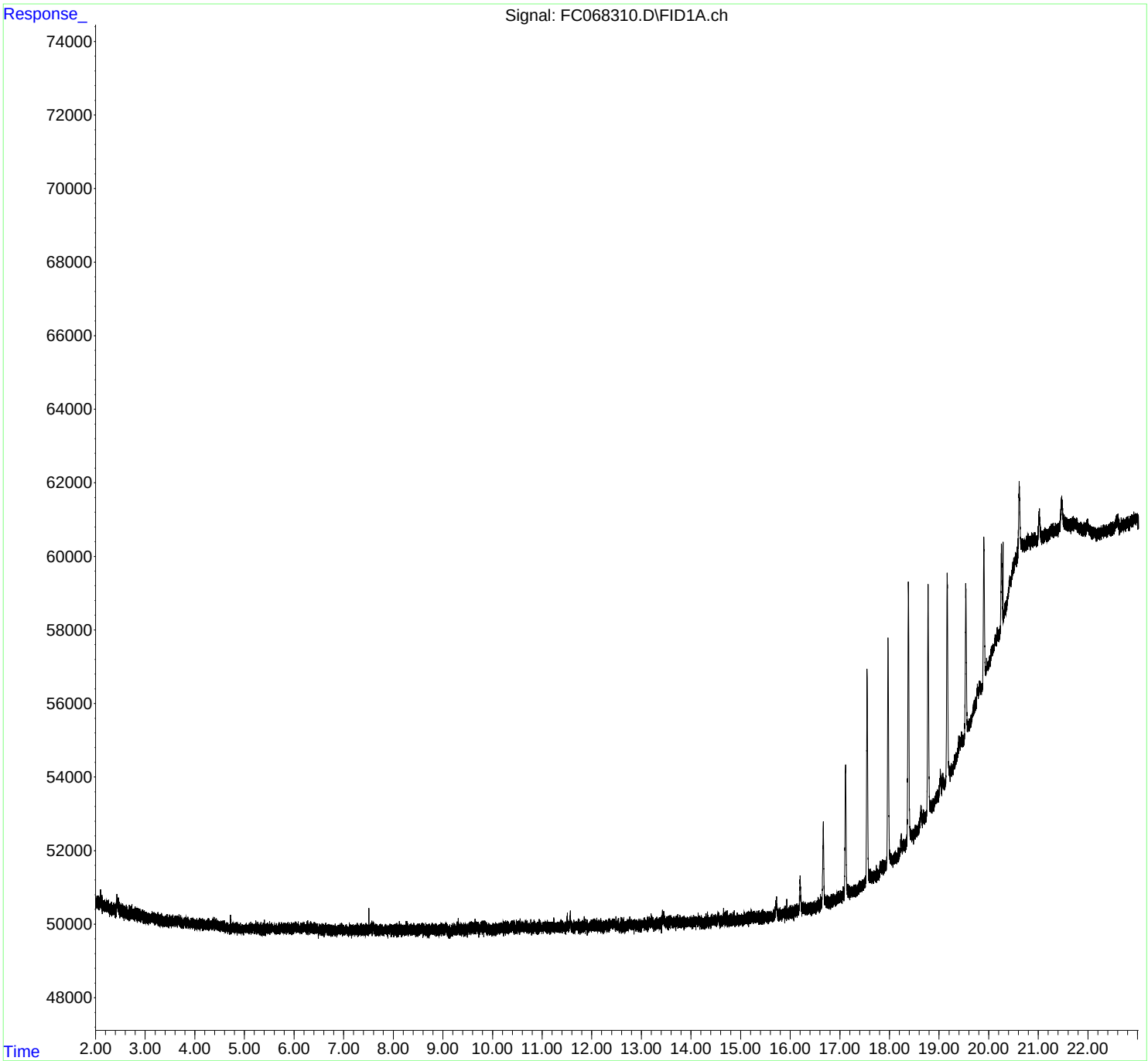
Quantitation Report (QT Reviewed)

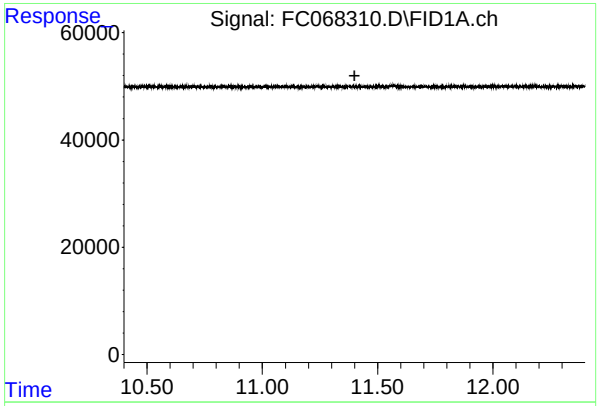
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022725AL\
Data File : FC068310.D
Signal(s) : FID1A.ch
Acq On : 27 Feb 2025 12:50
Operator : YP/AJ
Sample : I.BLK
Misc :
ALS Vial : 1 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
I.BLK

Integration File: autoint1.e
Quant Time: Feb 28 00:25:28 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:52:40 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

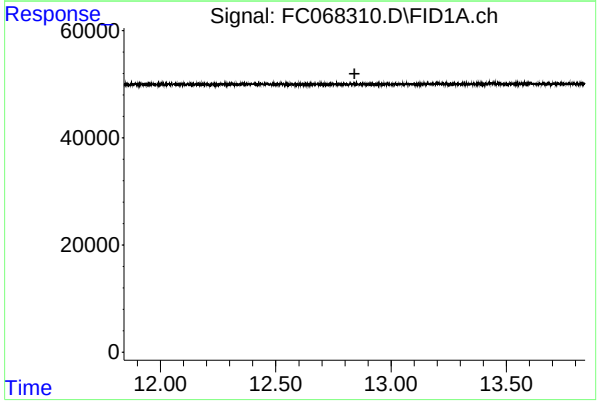





#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.400 min
Response: 0
Conc: N.D.

**Instrument :**
FID_C
**ClientSampleId :**
I.BLK




#12 1-chlorooctadecane (SURR)

R.T.: 0.000 min
Exp R.T. : 12.842 min
Response: 0
Conc: N.D.

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022725AL\
Data File : FC068310.D
Signal(s) : FID1A.ch
Acq On : 27 Feb 2025 12:50
Sample : I.BLK
Misc :
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Title : GC Extractables

Signal : FID1A.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|

No peaks were detected!

Aliphatic EPH 021125.M Fri Feb 28 01:09:50 2025

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

# Quantitation Report For Aliphatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | I.BLK | Acq On: | 27 Feb 2025 17:08 |
| Client Sample ID: | I.BLK | Operator: | YP/AJ |
| Data file: | FC068317.D | Misc: | |
| Instrument: | FID_C | ALS Vial: | 1 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aliphatic C9-C12 | 3.104 | 6.370 | 0 | 0 | 300 | ug/ml |
| Aliphatic C12-C16 | 6.371 | 9.754 | 0 | 0 | 200 | ug/ml |
| Aliphatic C16-C21 | 9.755 | 13.108 | 0 | 0 | 300 | ug/ml |
| Aliphatic C21-C28 | 13.109 | 16.762 | 0 | 0 | 400 | ug/ml |
| Aliphatic C28-C40 | 16.763 | 21.566 | 0 | 0 | 600 | ug/ml |
| Aliphatic EPH | 3.104 | 21.566 | 0 | 0 | | ug/ml |
| ortho-Terphenyl (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |
| 1-chlorooctadecane (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |
| Aliphatic C9-C28 | 3.104 | 16.762 | 0 | 0 | 1200 | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022725AL\
Data File : FC068317.D
Signal(s) : FID1A.ch
Acq On : 27 Feb 2025 17:08
Operator : YP/AJ
Sample : I.BLK
Misc :
ALS Vial : 1 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
I.BLK

Integration File: autoint1.e
Quant Time: Feb 28 00:28:25 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:52:40 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

| Compound | R.T. | Response | Conc | Units |
|---|---|---|---|---|

System Monitoring Compounds

Target Compounds

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

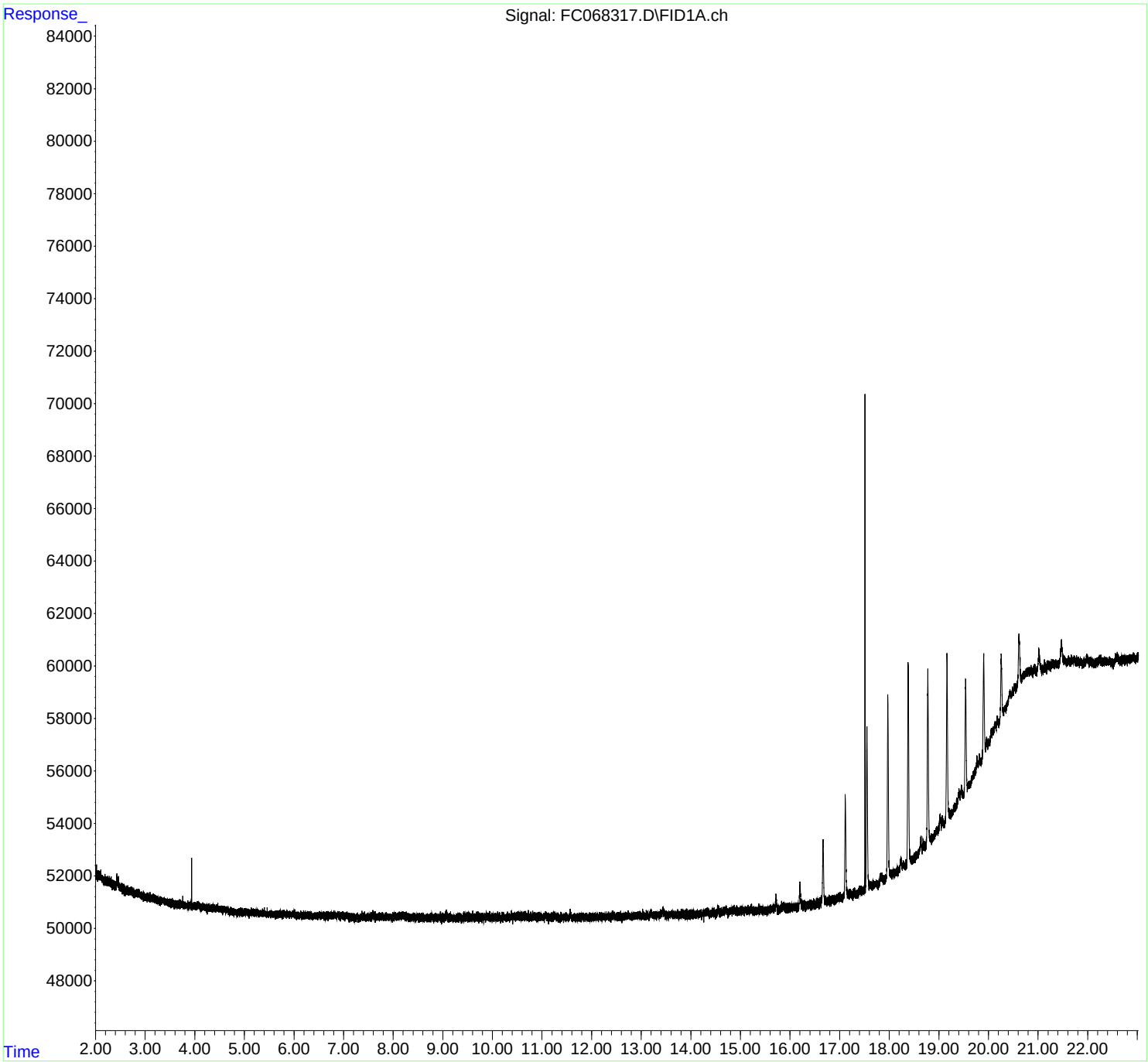
Quantitation Report (QT Reviewed)

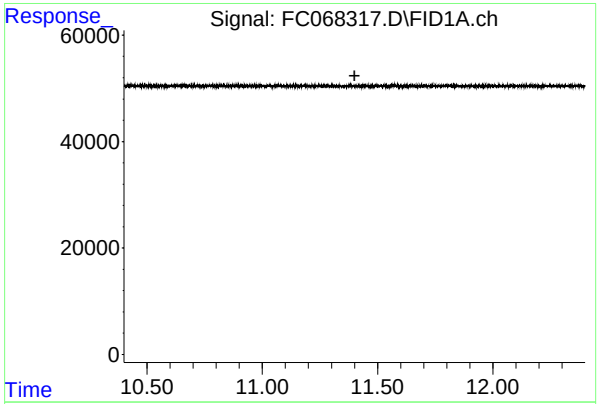
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022725AL\
Data File : FC068317.D
Signal(s) : FID1A.ch
Acq On : 27 Feb 2025 17:08
Operator : YP/AJ
Sample : I.BLK
Misc :
ALS Vial : 1 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
I.BLK

Integration File: autoint1.e
Quant Time: Feb 28 00:28:25 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:52:40 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

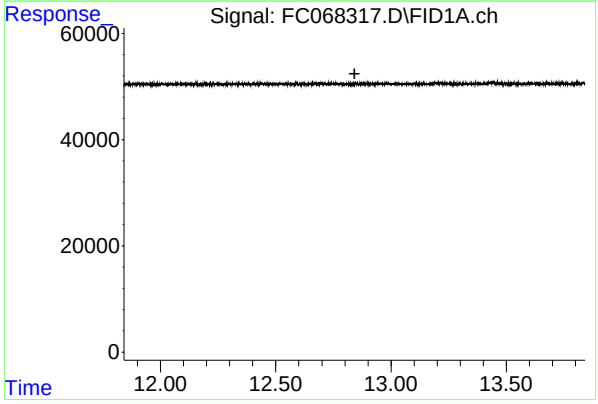





#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.400 min
Response: 0
Conc: N.D.

**Instrument :**
FID_C
**ClientSampleId :**
I.BLK




#12 1-chlorooctadecane (SURR)

R.T.: 0.000 min
Exp R.T. : 12.842 min
Response: 0
Conc: N.D.

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022725AL\
Data File : FC068317.D
Signal(s) : FID1A.ch
Acq On : 27 Feb 2025 17:08
Sample : I.BLK
Misc :
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Title : GC Extractables

Signal : FID1A.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|

No peaks were detected!

Aliphatic EPH 021125.M Fri Feb 28 01:11:40 2025

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

# Quantitation Report For Aliphatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | I.BLK | Acq On: | 28 Feb 2025 09:46 |
| Client Sample ID: | I.BLK | Operator: | YP/AJ |
| Data file: | FC068320.D | Misc: | |
| Instrument: | FID_C | ALS Vial: | 1 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aliphatic C9-C12 | 3.104 | 6.369 | 0 | 0 | 300 | ug/ml |
| Aliphatic C12-C16 | 6.370 | 9.754 | 0 | 0 | 200 | ug/ml |
| Aliphatic C16-C21 | 9.755 | 13.107 | 0 | 0 | 300 | ug/ml |
| Aliphatic C21-C28 | 13.108 | 16.761 | 0 | 0 | 400 | ug/ml |
| Aliphatic C28-C40 | 16.762 | 21.565 | 0 | 0 | 600 | ug/ml |
| Aliphatic EPH | 3.104 | 21.565 | 0 | 0 | | ug/ml |
| ortho-Terphenyl (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |
| 1-chlorooctadecane (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |
| Aliphatic C9-C28 | 3.104 | 16.761 | 0 | 0 | 1200 | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022825AL\
Data File : FC068320.D
Signal(s) : FID1A.ch
Acq On : 28 Feb 2025 09:46
Operator : YP/AJ
Sample : I.BLK
Misc :
ALS Vial : 1 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
I.BLK

Integration File: autoint1.e
Quant Time: Mar 01 00:32:04 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:52:40 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

| Compound | R.T. | Response | Conc | Units |
|---|---|---|---|---|

System Monitoring Compounds

Target Compounds

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

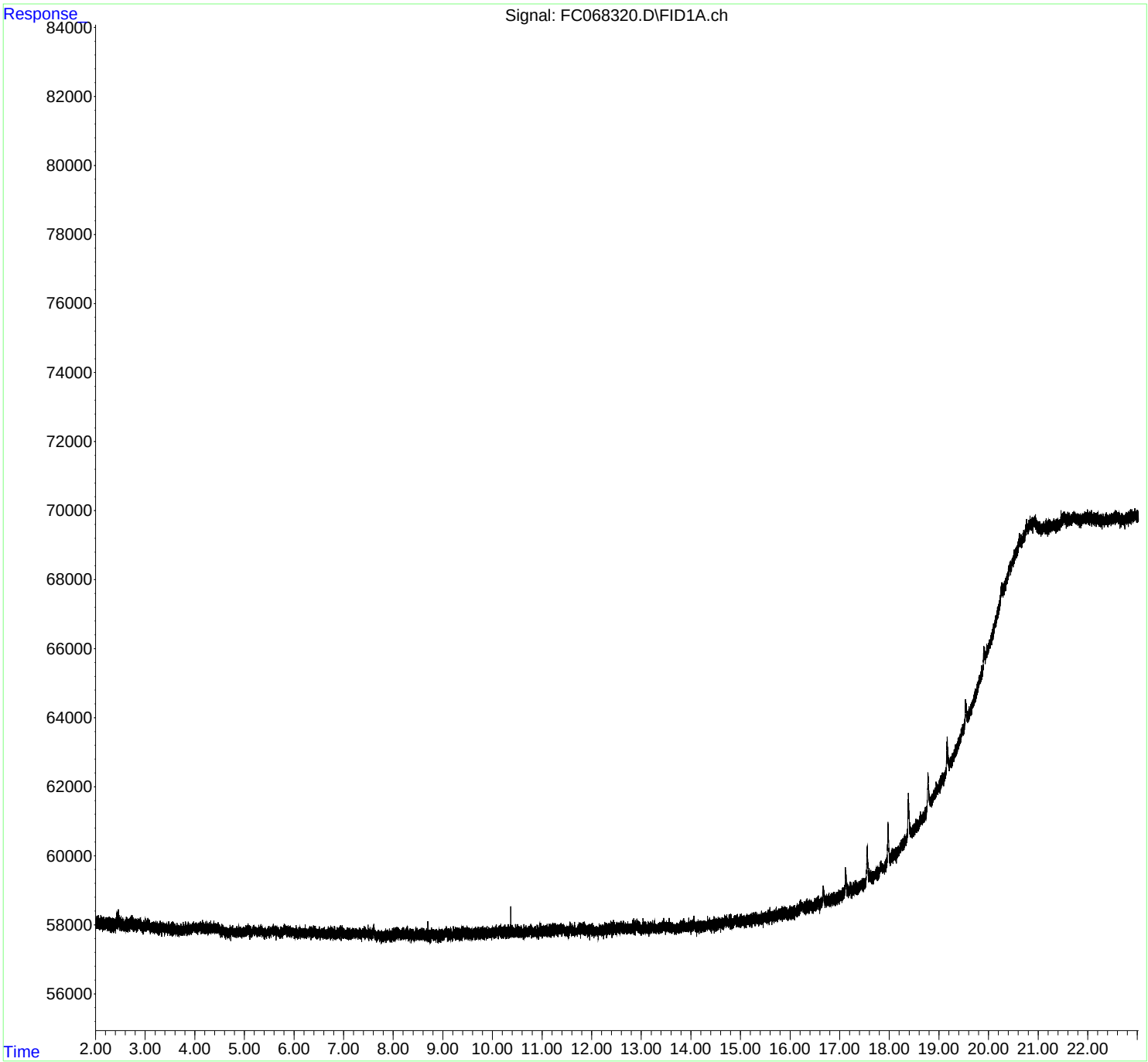
Quantitation Report (QT Reviewed)

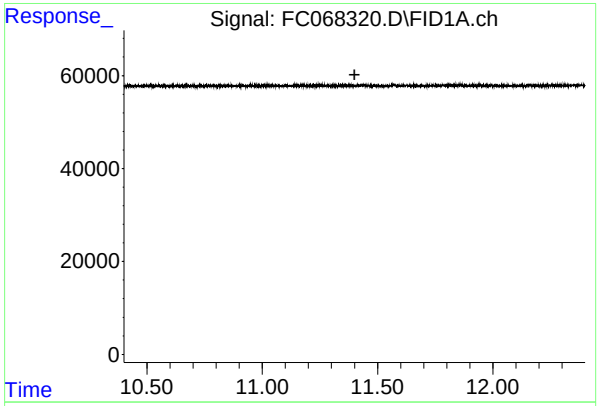
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022825AL\
Data File : FC068320.D
Signal(s) : FID1A.ch
Acq On : 28 Feb 2025 09:46
Operator : YP/AJ
Sample : I.BLK
Misc :
ALS Vial : 1 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
I.BLK

Integration File: autoint1.e
Quant Time: Mar 01 00:32:04 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:52:40 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

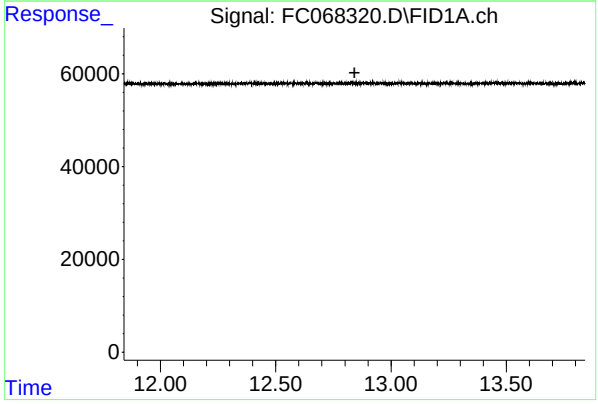





#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.400 min
Response: 0
Conc: N.D.

**Instrument :**
FID_C
**ClientSampleId :**
I.BLK




#12 1-chlorooctadecane (SURR)

R.T.: 0.000 min
Exp R.T. : 12.842 min
Response: 0
Conc: N.D.

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022825AL\
Data File : FC068320.D
Signal(s) : FID1A.ch
Acq On : 28 Feb 2025 09:46
Sample : I.BLK
Misc :
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Title : GC Extractables

Signal : FID1A.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|

No peaks were detected!

Aliphatic EPH 021125.M Sat Mar 01 01:22:01 2025

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

# Quantitation Report For Aliphatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | I.BLK | Acq On: | 28 Feb 2025 15:53 |
| Client Sample ID: | I.BLK | Operator: | YP/AJ |
| Data file: | FC068330.D | Misc: | |
| Instrument: | FID_C | ALS Vial: | 1 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aliphatic C9-C12 | 3.104 | 6.369 | 0 | 0 | 300 | ug/ml |
| Aliphatic C12-C16 | 6.370 | 9.754 | 0 | 0 | 200 | ug/ml |
| Aliphatic C16-C21 | 9.755 | 13.107 | 0 | 0 | 300 | ug/ml |
| Aliphatic C21-C28 | 13.108 | 16.761 | 0 | 0 | 400 | ug/ml |
| Aliphatic C28-C40 | 16.762 | 21.565 | 0 | 0 | 600 | ug/ml |
| Aliphatic EPH | 3.104 | 21.565 | 0 | 0 | | ug/ml |
| ortho-Terphenyl (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |
| 1-chlorooctadecane (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |
| Aliphatic C9-C28 | 3.104 | 16.761 | 0 | 0 | 1200 | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022825AL\
Data File : FC068330.D
Signal(s) : FID1A.ch
Acq On : 28 Feb 2025 15:53
Operator : YP/AJ
Sample : I.BLK
Misc :
ALS Vial : 1 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
I.BLK

Integration File: autoint1.e
Quant Time: Mar 01 00:35:38 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:52:40 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

| Compound | R.T. | Response | Conc | Units |
|---|---|---|---|---|

System Monitoring Compounds

Target Compounds

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

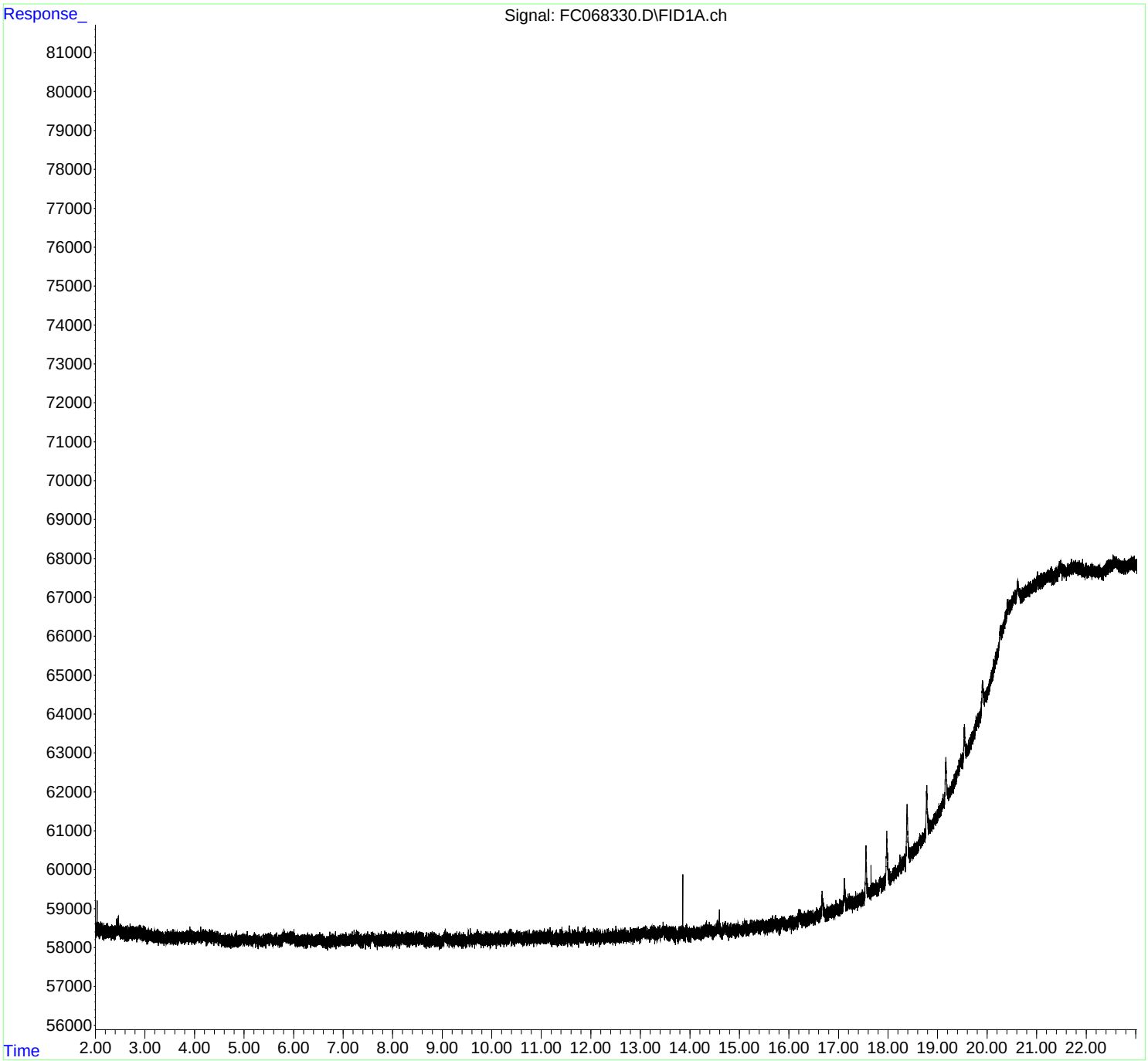
Quantitation Report (QT Reviewed)

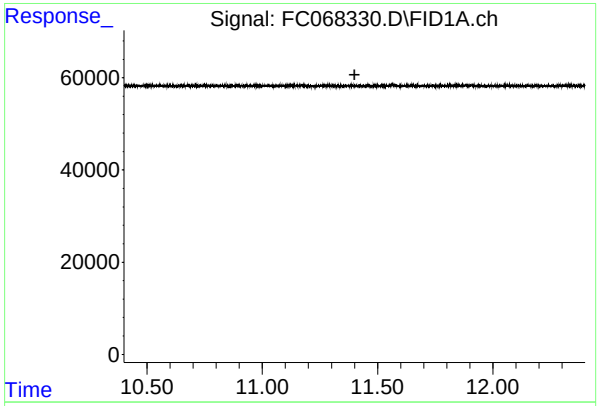
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022825AL\
Data File : FC068330.D
Signal(s) : FID1A.ch
Acq On : 28 Feb 2025 15:53
Operator : YP/AJ
Sample : I.BLK
Misc :
ALS Vial : 1 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
I.BLK

Integration File: autoint1.e
Quant Time: Mar 01 00:35:38 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:52:40 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

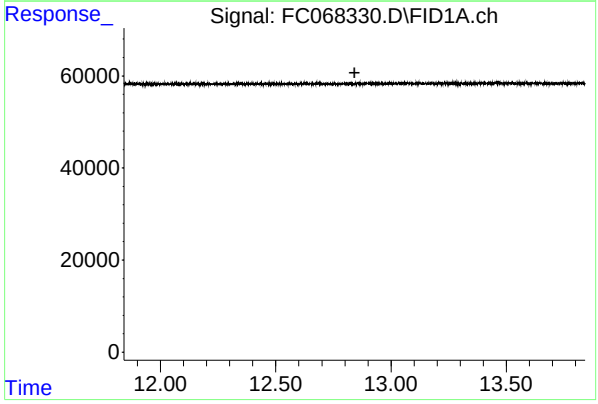





#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.400 min
Response: 0
Conc: N.D.

**Instrument :**
FID_C
**ClientSampleId :**
I.BLK




#12 1-chlorooctadecane (SURR)

R.T.: 0.000 min
Exp R.T. : 12.842 min
Response: 0
Conc: N.D.

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022825AL\
Data File : FC068330.D
Signal(s) : FID1A.ch
Acq On : 28 Feb 2025 15:53
Sample : I.BLK
Misc :
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Title : GC Extractables

Signal : FID1A.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|

No peaks were detected!

Aliphatic EPH 021125.M Sat Mar 01 01:23:59 2025

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

# Quantitation Report For Aliphatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | I.BLK | Acq On: | 28 Feb 2025 23:13 |
| Client Sample ID: | I.BLK | Operator: | YP/AJ |
| Data file: | FC068340.D | Misc: | |
| Instrument: | FID_C | ALS Vial: | 1 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aliphatic C9-C12 | 3.104 | 6.369 | 0 | 0 | 300 | ug/ml |
| Aliphatic C12-C16 | 6.370 | 9.754 | 0 | 0 | 200 | ug/ml |
| Aliphatic C16-C21 | 9.755 | 13.107 | 0 | 0 | 300 | ug/ml |
| Aliphatic C21-C28 | 13.108 | 16.761 | 0 | 0 | 400 | ug/ml |
| Aliphatic C28-C40 | 16.762 | 21.565 | 0 | 0 | 600 | ug/ml |
| Aliphatic EPH | 3.104 | 21.565 | 0 | 0 | | ug/ml |
| ortho-Terphenyl (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |
| 1-chlorooctadecane (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |
| Aliphatic C9-C28 | 3.104 | 16.761 | 0 | 0 | 1200 | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022825AL\
Data File : FC068340.D
Signal(s) : FID1A.ch
Acq On : 28 Feb 2025 23:13
Operator : YP/AJ
Sample : I.BLK
Misc :
ALS Vial : 1 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
I.BLK

Integration File: autoint1.e
Quant Time: Mar 01 00:39:23 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:52:40 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

| Compound | R.T. | Response | Conc | Units |
|---|---|---|---|---|

System Monitoring Compounds

Target Compounds

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

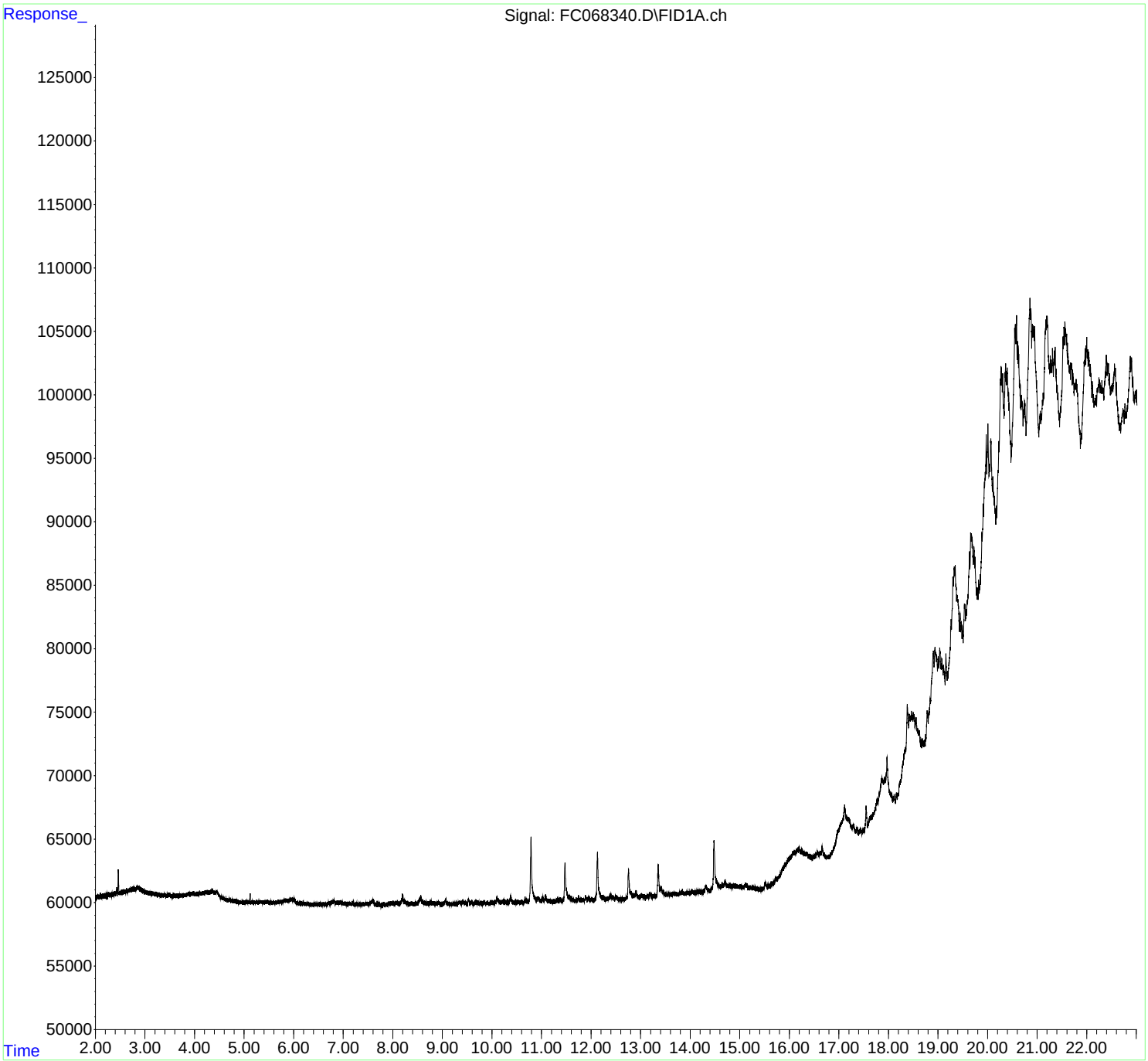
Quantitation Report (QT Reviewed)

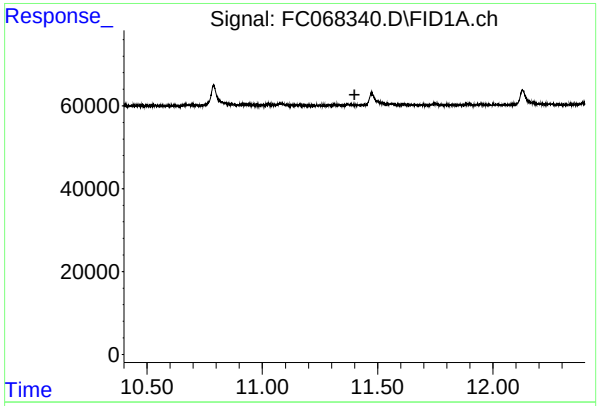
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022825AL\
Data File : FC068340.D
Signal(s) : FID1A.ch
Acq On : 28 Feb 2025 23:13
Operator : YP/AJ
Sample : I.BLK
Misc :
ALS Vial : 1 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
I.BLK

Integration File: autoint1.e
Quant Time: Mar 01 00:39:23 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:52:40 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

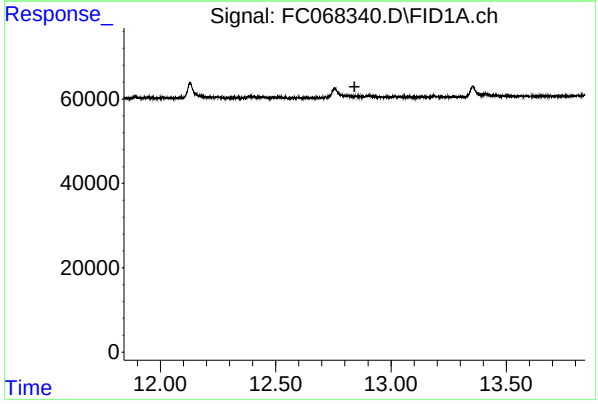





#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.400 min
Response: 0
Conc: N.D.

**Instrument :**
FID_C
**ClientSampleId :**
I.BLK




#12 1-chlorooctadecane (SURR)

R.T.: 0.000 min
Exp R.T. : 12.842 min
Response: 0
Conc: N.D.

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022825AL\
Data File : FC068340.D
Signal(s) : FID1A.ch
Acq On : 28 Feb 2025 23:13
Sample : I.BLK
Misc :
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Title : GC Extractables

Signal : FID1A.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|

No peaks were detected!
Aliphatic EPH 021125.M Sat Mar 01 01:24:47 2025

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

# Quantitation Report For Aromatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | I.BLK | Acq On: | 10 Feb 2025 12:45 |
| Client Sample ID: | I.BLK | Operator: | YP/AJ |
| Data file: | FD049071.D | Misc: | |
| Instrument: | FID_D | ALS Vial: | 51 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aromatic C10-C12 | 4.075 | 5.793 | 0 | 0 | 200 | ug/ml |
| Aromatic C12-C16 | 5.794 | 8.396 | 0 | 0 | 300 | ug/ml |
| Aromatic C16-C21 | 8.397 | 12.658 | 0 | 0 | 500 | ug/ml |
| Aromatic C21-C36 | 12.659 | 18.067 | 0 | 0 | 800 | ug/ml |
| Aromatic EPH | 4.075 | 18.067 | 0 | 0 | | ug/ml |
| 2-Bromonaphthalene (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |
| 2-Flurobiphenyl (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |
| ortho-Terphenyl (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD021125AR\
Data File : FD049071.D
Signal(s) : FID2B.ch
Acq On : 10 Feb 2025 12:45
Operator : YP/AJ
Sample : I.BLK
Misc :
ALS Vial : 51 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
I.BLK

Integration File: autoint1.e
Quant Time: Mar 06 03:56:06 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

| Compound | R.T. | Response | Conc | Units |
|---|---|---|---|---|

System Monitoring Compounds

Target Compounds

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

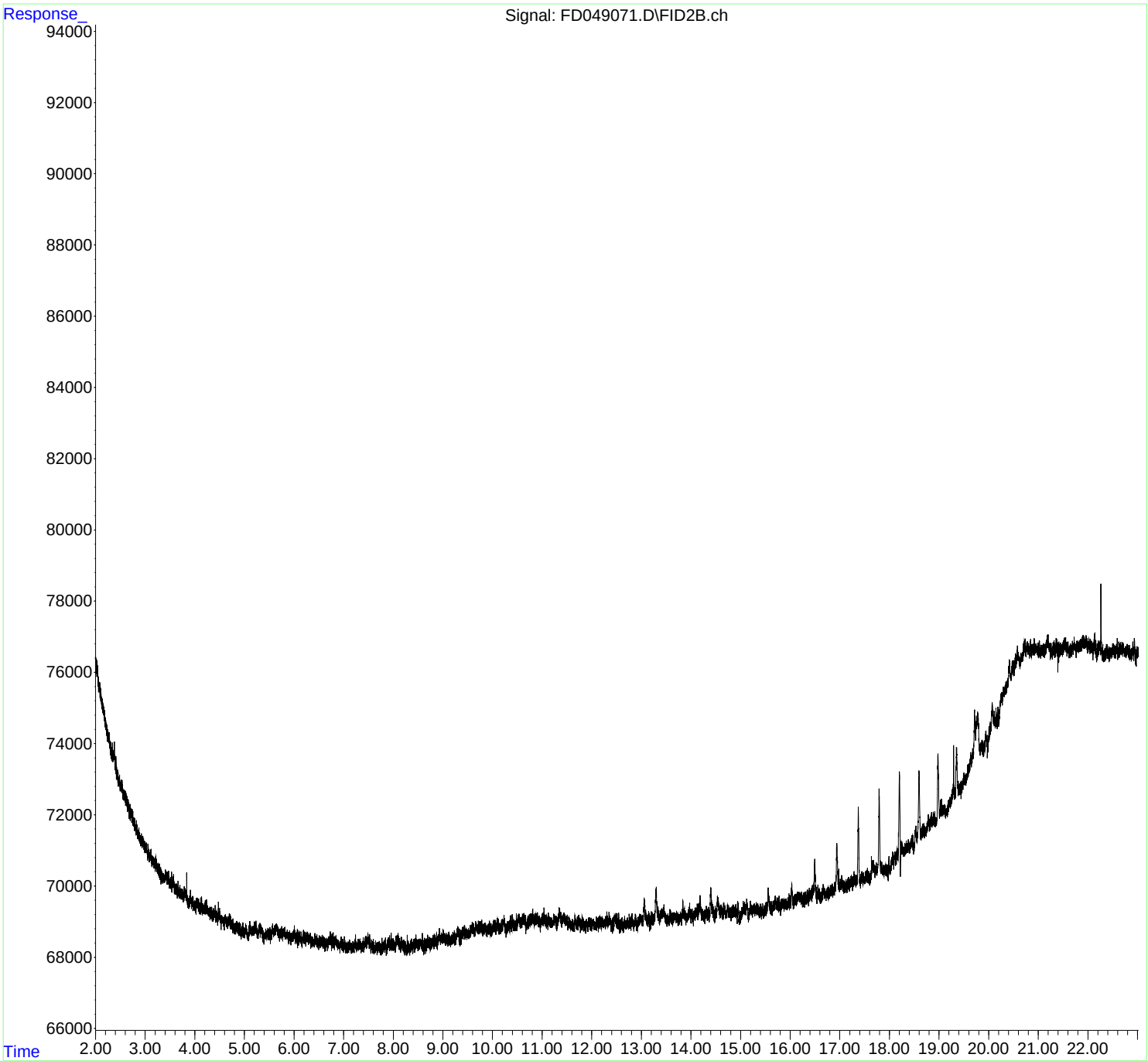
Quantitation Report (QT Reviewed)

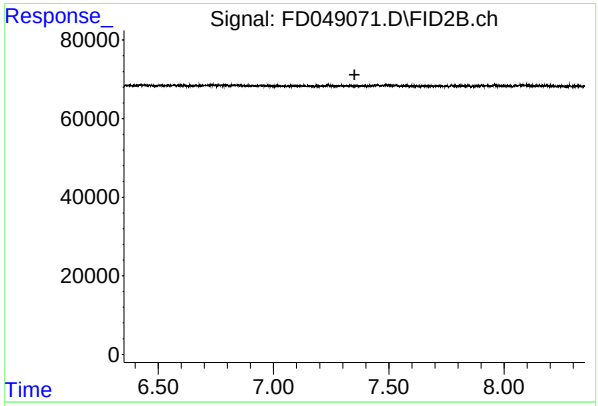
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD021125AR\
Data File : FD049071.D
Signal(s) : FID2B.ch
Acq On : 10 Feb 2025 12:45
Operator : YP/AJ
Sample : I.BLK
Misc :
ALS Vial : 51 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
I.BLK

Integration File: autoint1.e
Quant Time: Mar 06 03:56:06 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

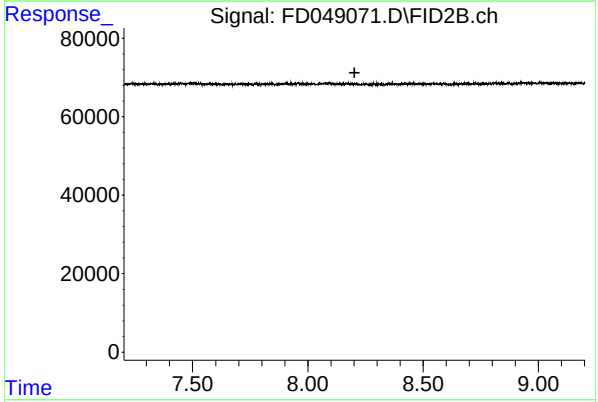





#4 2-Bromonaphthalene (SURR)

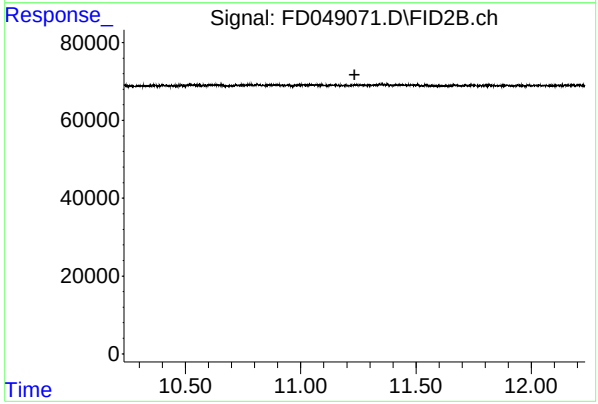
R.T.: 0.000 min
Exp R.T. : 7.351 min
Response: 0
Conc: N.D.

**Instrument :**
FID_D
**ClientSampleId :**
I.BLK




#6 2-Flurobiphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 8.202 min
Response: 0
Conc: N.D.




#11 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.233 min
Response: 0
Conc: N.D.

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD021125AR\
Data File : FD049071.D
Signal(s) : FID2B.ch
Acq On : 10 Feb 2025 12:45
Sample : I.BLK
Misc :
ALS Vial : 51 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Title : GC Extractables

Signal : FID2B.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|

No peaks were detected!

Aromatic EPH 021125.M Thu Mar 06 03:57:18 2025

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

# Quantitation Report For Aromatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | I.BLK | Acq On: | 27 Feb 2025 07:22 |
| Client Sample ID: | I.BLK | Operator: | YP/AJ |
| Data file: | FD049113.D | Misc: | |
| Instrument: | FID_D | ALS Vial: | 51 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aromatic C10-C12 | 4.076 | 5.794 | 0 | 0 | 200 | ug/ml |
| Aromatic C12-C16 | 5.795 | 8.397 | 0 | 0 | 300 | ug/ml |
| Aromatic C16-C21 | 8.398 | 12.661 | 0 | 0 | 500 | ug/ml |
| Aromatic C21-C36 | 12.662 | 18.071 | 0 | 0 | 800 | ug/ml |
| Aromatic EPH | 4.076 | 18.071 | 0 | 0 | | ug/ml |
| 2-Bromonaphthalene (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |
| 2-Flurobiphenyl (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |
| ortho-Terphenyl (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022725AR\
Data File : FD049113.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2025 07:22
Operator : YP/AJ
Sample : I.BLK
Misc :
ALS Vial : 51 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
I.BLK

Integration File: autoint1.e
Quant Time: Feb 28 01:24:37 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

| Compound | R.T. | Response | Conc | Units |
|---|---|---|---|---|

System Monitoring Compounds

Target Compounds

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

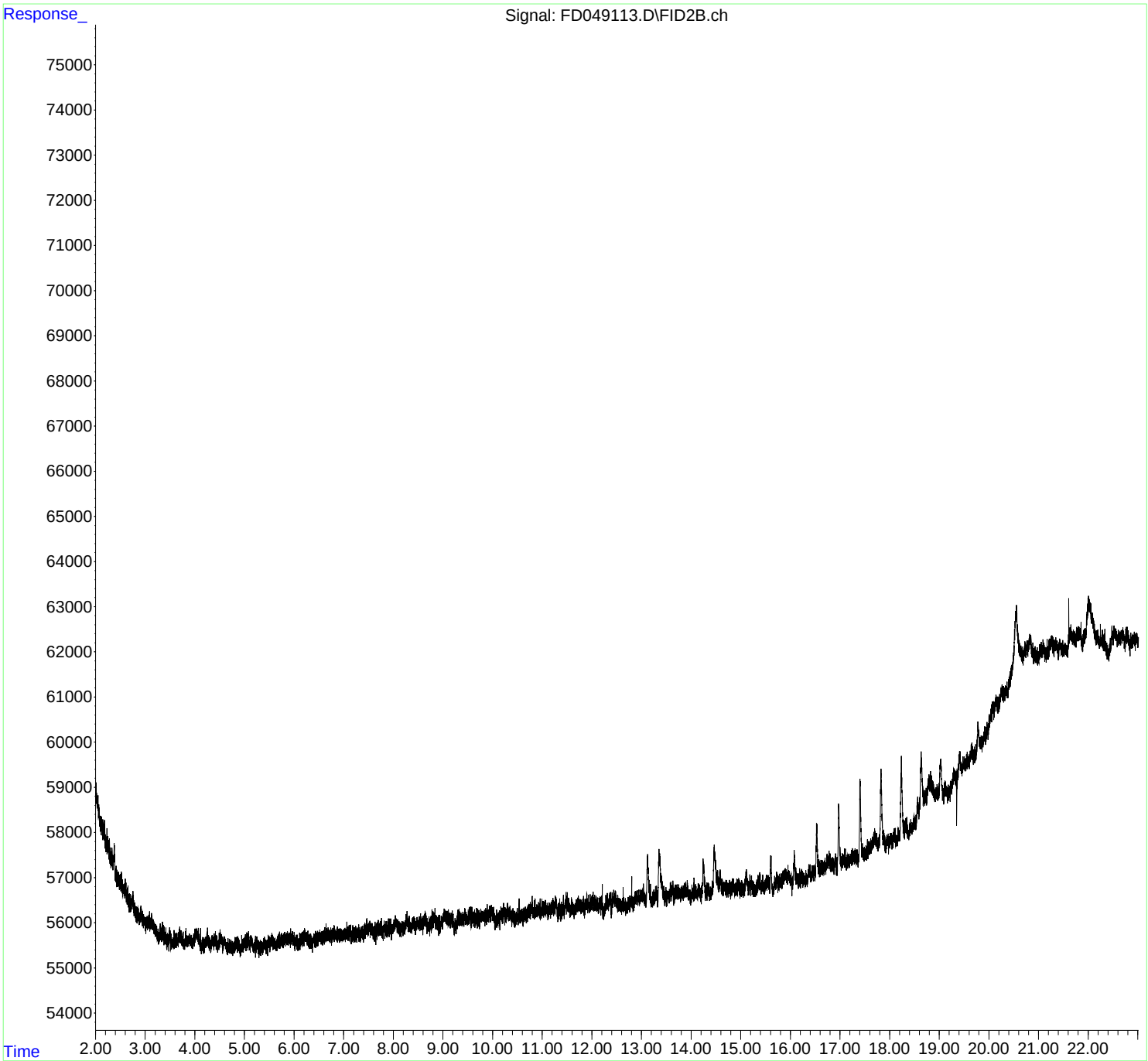
Quantitation Report (QT Reviewed)

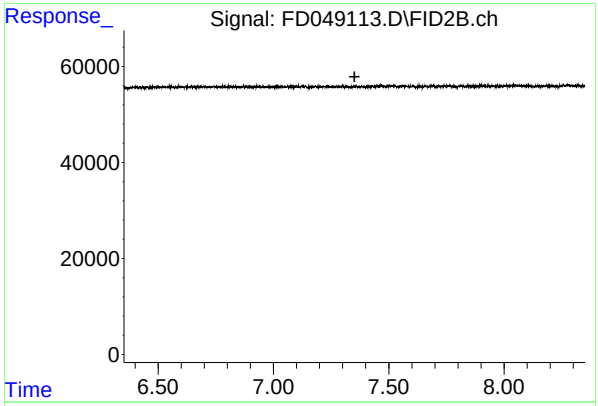
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022725AR\
Data File : FD049113.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2025 07:22
Operator : YP/AJ
Sample : I.BLK
Misc :
ALS Vial : 51 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
I.BLK

Integration File: autoint1.e
Quant Time: Feb 28 01:24:37 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

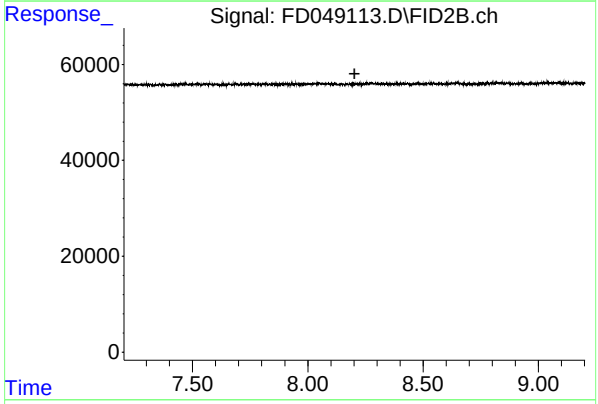





#4 2-Bromonaphthalene (SURR)

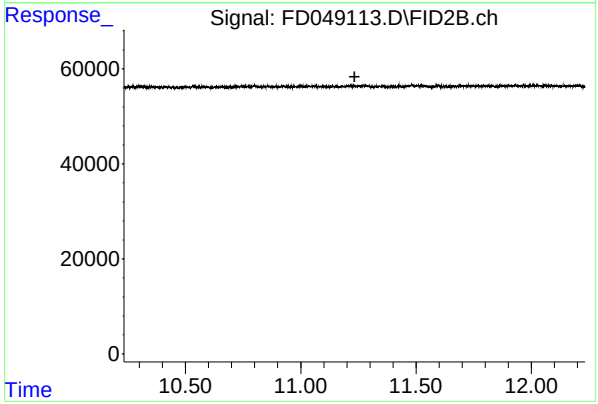
R.T.: 0.000 min
Exp R.T. : 7.351 min
Response: 0
Conc: N.D.

**Instrument :**
FID_D
**ClientSampleId :**
I.BLK




#6 2-Flurobiphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 8.202 min
Response: 0
Conc: N.D.




#11 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.233 min
Response: 0
Conc: N.D.

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022725AR\
Data File : FD049113.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2025 07:22
Sample : I.BLK
Misc :
ALS Vial : 51 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Title : GC Extractables

Signal : FID2B.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|

No peaks were detected!

Aromatic EPH 021125.M Fri Feb 28 01:54:21 2025

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

# Quantitation Report For Aromatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | I.BLK | Acq On: | 27 Feb 2025 12:50 |
| Client Sample ID: | I.BLK | Operator: | YP/AJ |
| Data file: | FD049119.D | Misc: | |
| Instrument: | FID_D | ALS Vial: | 51 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aromatic C10-C12 | 4.076 | 5.794 | 0 | 0 | 200 | ug/ml |
| Aromatic C12-C16 | 5.795 | 8.397 | 0 | 0 | 300 | ug/ml |
| Aromatic C16-C21 | 8.398 | 12.661 | 0 | 0 | 500 | ug/ml |
| Aromatic C21-C36 | 12.662 | 18.071 | 0 | 0 | 800 | ug/ml |
| Aromatic EPH | 4.076 | 18.071 | 0 | 0 | | ug/ml |
| 2-Bromonaphthalene (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |
| 2-Flurobiphenyl (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |
| ortho-Terphenyl (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022725AR\
Data File : FD049119.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2025 12:50
Operator : YP/AJ
Sample : I.BLK
Misc :
ALS Vial : 51 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
I.BLK

Integration File: autoint1.e
Quant Time: Feb 28 01:26:42 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

| Compound | R.T. | Response | Conc | Units |
|---|---|---|---|---|

System Monitoring Compounds

Target Compounds

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

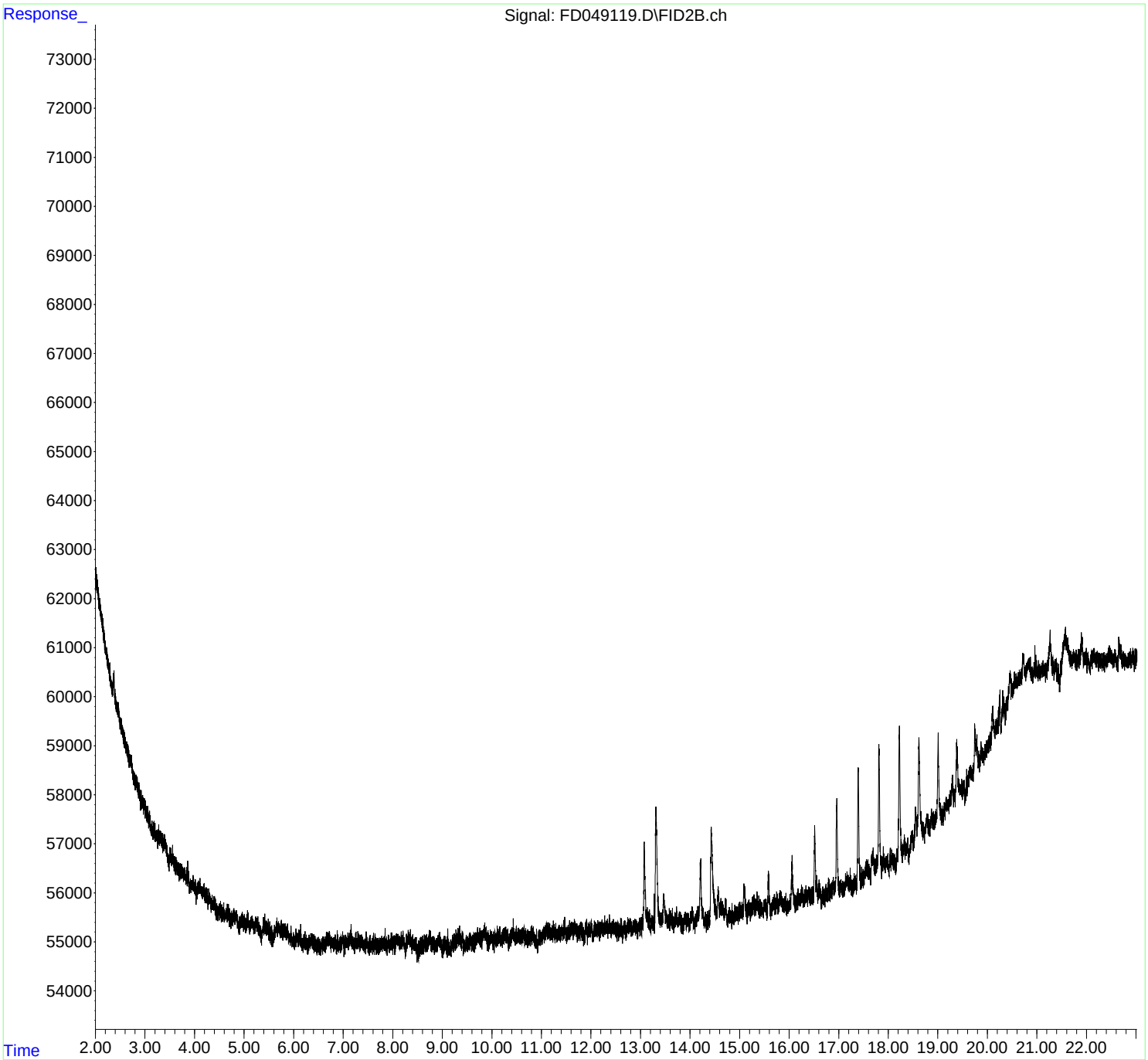
Quantitation Report (QT Reviewed)

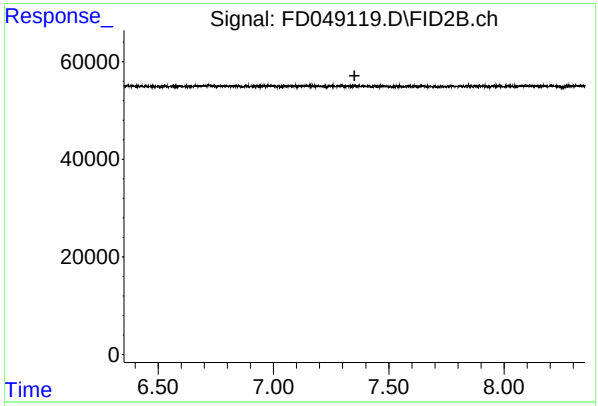
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022725AR\
Data File : FD049119.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2025 12:50
Operator : YP/AJ
Sample : I.BLK
Misc :
ALS Vial : 51 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
I.BLK

Integration File: autoint1.e
Quant Time: Feb 28 01:26:42 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

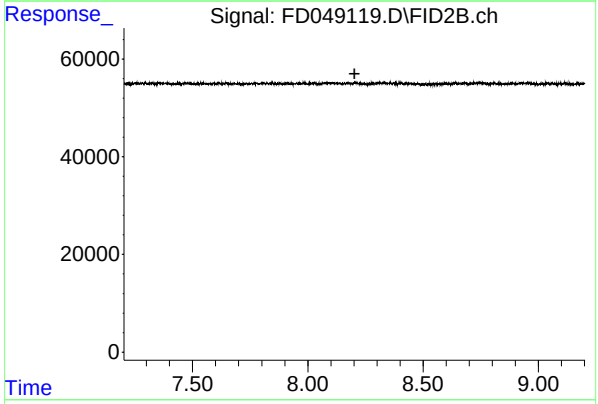





#4 2-Bromonaphthalene (SURR)

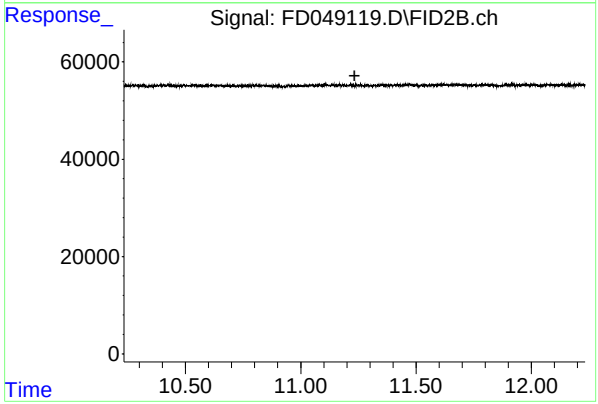
R.T.: 0.000 min
Exp R.T. : 7.351 min
Response: 0
Conc: N.D.

**Instrument :**
FID_D
**ClientSampleId :**
I.BLK




#6 2-Flurobiphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 8.202 min
Response: 0
Conc: N.D.




#11 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.233 min
Response: 0
Conc: N.D.

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022725AR\
Data File : FD049119.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2025 12:50
Sample : I.BLK
Misc :
ALS Vial : 51 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Title : GC Extractables

Signal : FID2B.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|

No peaks were detected!

Aromatic EPH 021125.M Fri Feb 28 01:59:32 2025

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

# Quantitation Report For Aromatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | I.BLK | Acq On: | 27 Feb 2025 17:08 |
| Client Sample ID: | I.BLK | Operator: | YP/AJ |
| Data file: | FD049125.D | Misc: | |
| Instrument: | FID_D | ALS Vial: | 51 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aromatic C10-C12 | 4.076 | 5.794 | 0 | 0 | 200 | ug/ml |
| Aromatic C12-C16 | 5.795 | 8.397 | 0 | 0 | 300 | ug/ml |
| Aromatic C16-C21 | 8.398 | 12.661 | 0 | 0 | 500 | ug/ml |
| Aromatic C21-C36 | 12.662 | 18.071 | 0 | 0 | 800 | ug/ml |
| Aromatic EPH | 4.076 | 18.071 | 0 | 0 | | ug/ml |
| 2-Bromonaphthalene (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |
| 2-Flurobiphenyl (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |
| ortho-Terphenyl (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022725AR\
Data File : FD049125.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2025 17:08
Operator : YP/AJ
Sample : I.BLK
Misc :
ALS Vial : 51 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
I.BLK

Integration File: autoint1.e
Quant Time: Feb 28 01:28:56 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

| Compound | R.T. | Response | Conc | Units |
|---|---|---|---|---|

System Monitoring Compounds

Target Compounds

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

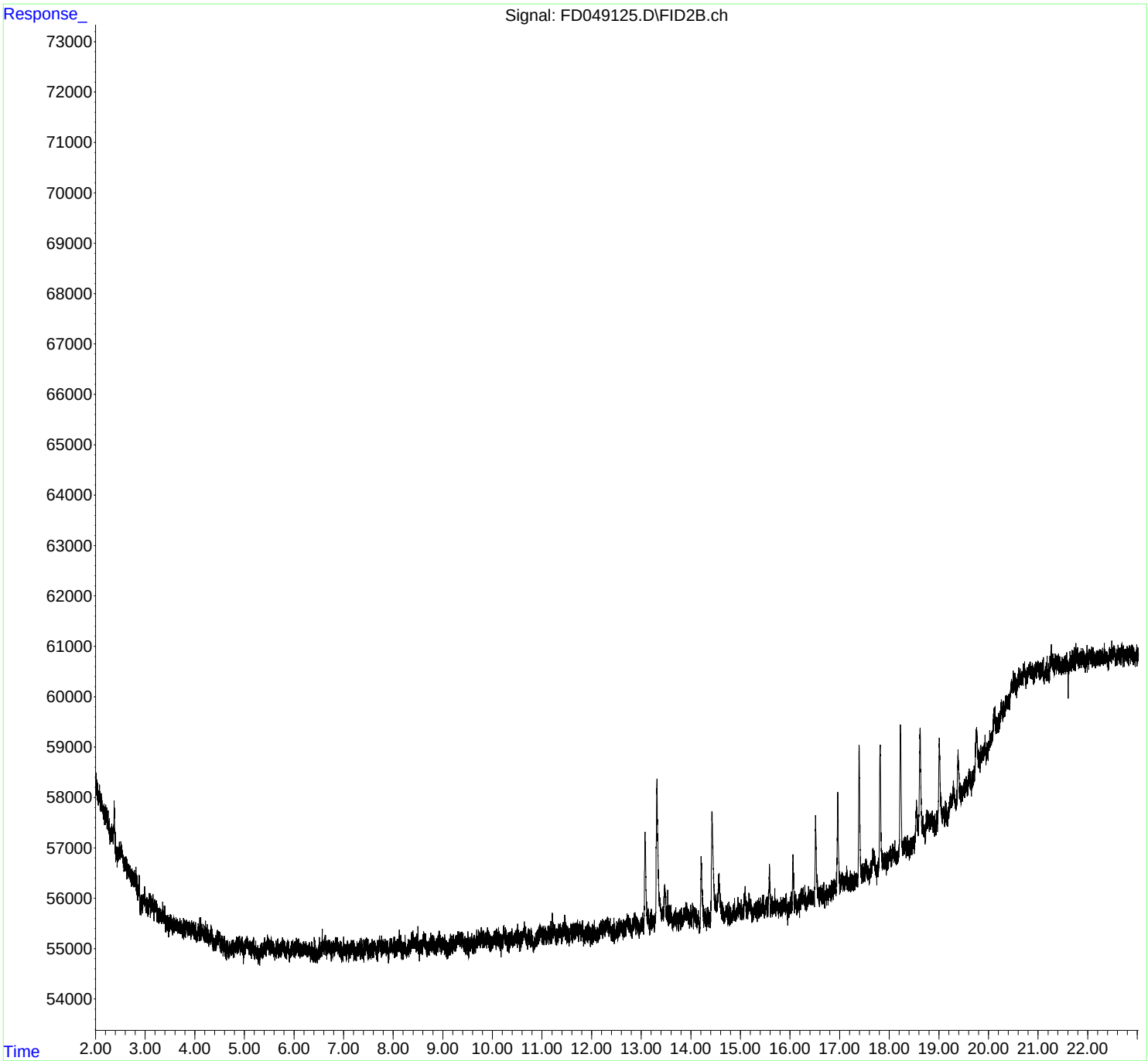
Quantitation Report (QT Reviewed)

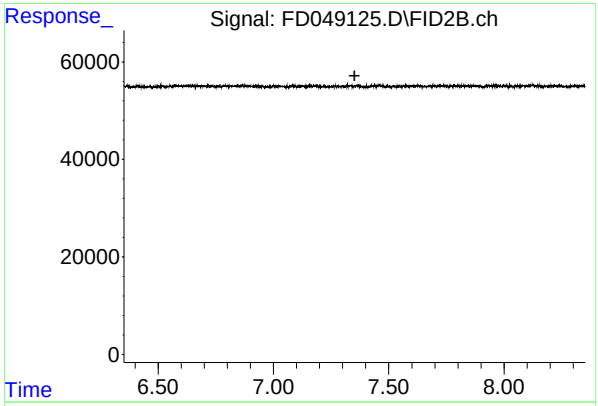
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022725AR\
Data File : FD049125.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2025 17:08
Operator : YP/AJ
Sample : I.BLK
Misc :
ALS Vial : 51 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
I.BLK

Integration File: autoint1.e
Quant Time: Feb 28 01:28:56 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

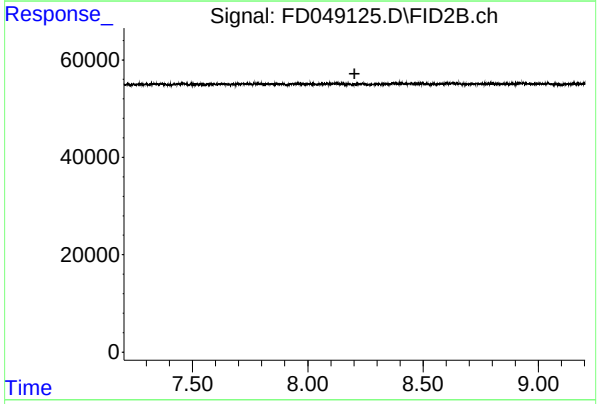





#4 2-Bromonaphthalene (SURR)

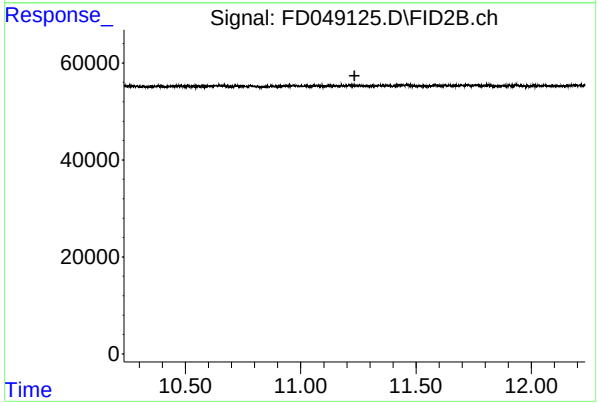
R.T.: 0.000 min
Exp R.T. : 7.351 min
Response: 0
Conc: N.D.

**Instrument :**
FID_D
**ClientSampleId :**
I.BLK




#6 2-Flurobiphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 8.202 min
Response: 0
Conc: N.D.




#11 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.233 min
Response: 0
Conc: N.D.

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022725AR\
Data File : FD049125.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2025 17:08
Sample : I.BLK
Misc :
ALS Vial : 51 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Title : GC Extractables

Signal : FID2B.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|

No peaks were detected!

Aromatic EPH 021125.M Fri Feb 28 02:00:32 2025

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

# Quantitation Report For Aromatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | I.BLK | Acq On: | 28 Feb 2025 09:46 |
| Client Sample ID: | I.BLK | Operator: | YP/AJ |
| Data file: | FD049128.D | Misc: | |
| Instrument: | FID_D | ALS Vial: | 51 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aromatic C10-C12 | 4.076 | 5.794 | 0 | 0 | 200 | ug/ml |
| Aromatic C12-C16 | 5.795 | 8.396 | 0 | 0 | 300 | ug/ml |
| Aromatic C16-C21 | 8.397 | 12.661 | 0 | 0 | 500 | ug/ml |
| Aromatic C21-C36 | 12.662 | 18.073 | 0 | 0 | 800 | ug/ml |
| Aromatic EPH | 4.076 | 18.073 | 0 | 0 | | ug/ml |
| ortho-Terphenyl (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |
| 2-Bromonaphthalene (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |
| 2-Flurobiphenyl (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022825AR\
Data File : FD049128.D
Signal(s) : FID2B.ch
Acq On : 28 Feb 2025 09:46
Operator : YP/AJ
Sample : I.BLK
Misc :
ALS Vial : 51 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
I.BLK

Integration File: autoint1.e
Quant Time: Mar 01 02:15:53 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

| Compound | R.T. | Response | Conc | Units |
|---|---|---|---|---|

System Monitoring Compounds

Target Compounds

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

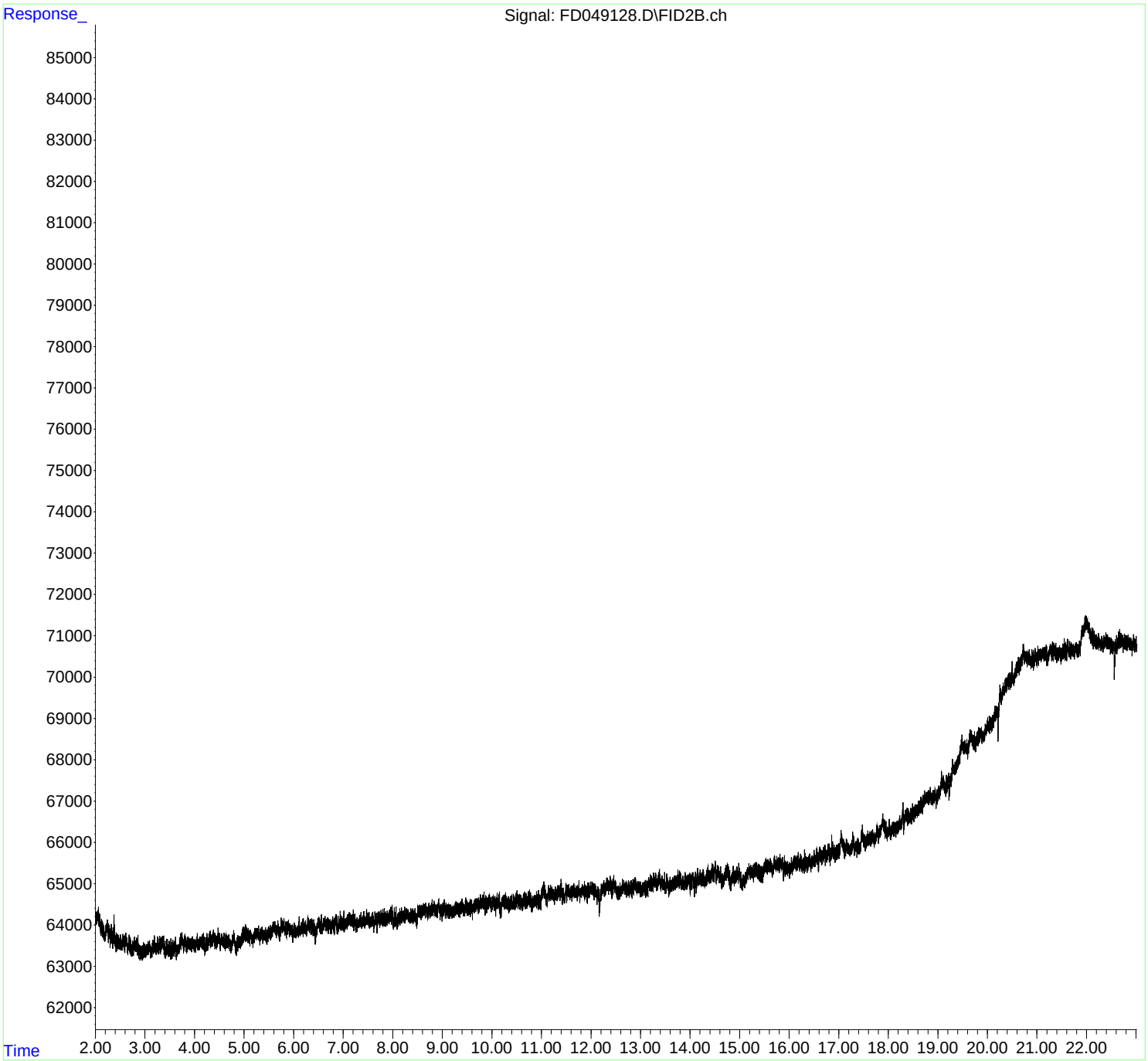
Quantitation Report (QT Reviewed)

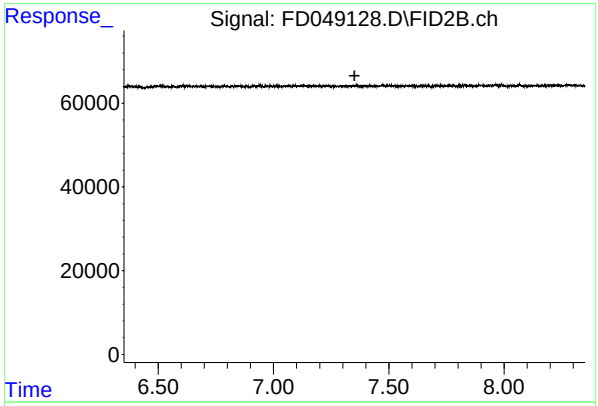
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022825AR\
Data File : FD049128.D
Signal(s) : FID2B.ch
Acq On : 28 Feb 2025 09:46
Operator : YP/AJ
Sample : I.BLK
Misc :
ALS Vial : 51 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
I.BLK

Integration File: autoint1.e
Quant Time: Mar 01 02:15:53 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

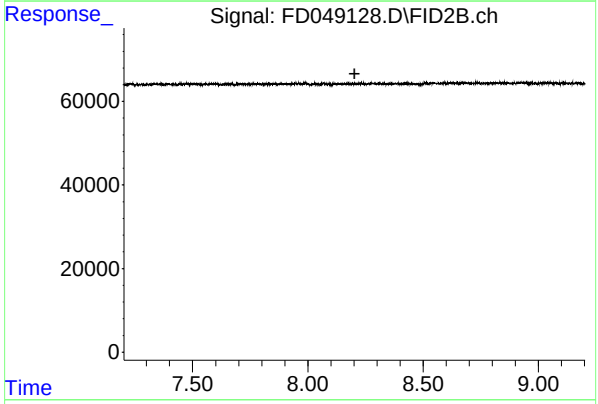





#4 2-Bromonaphthalene (SURR)

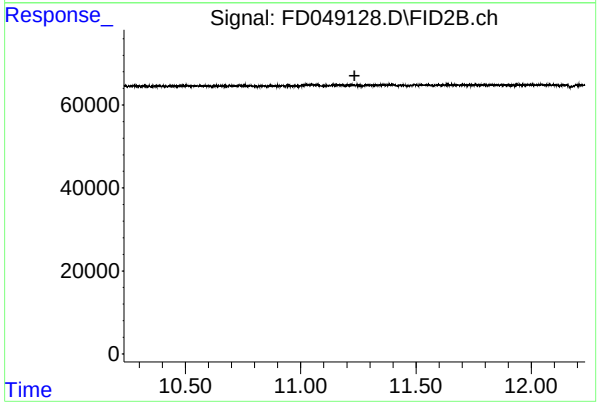
R.T.: 0.000 min
Exp R.T. : 7.351 min
Response: 0
Conc: N.D.

**Instrument :**
FID_D
**ClientSampleId :**
I.BLK




#6 2-Flurobiphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 8.202 min
Response: 0
Conc: N.D.




#11 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.233 min
Response: 0
Conc: N.D.

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022825AR\
Data File : FD049128.D
Signal(s) : FID2B.ch
Acq On : 28 Feb 2025 09:46
Sample : I.BLK
Misc :
ALS Vial : 51 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Title : GC Extractables

Signal : FID2B.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|

No peaks were detected!

Aromatic EPH 021125.M Sat Mar 01 03:48:52 2025

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

# Quantitation Report For Aromatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | I.BLK | Acq On: | 28 Feb 2025 15:53 |
| Client Sample ID: | I.BLK | Operator: | YP/AJ |
| Data file: | FD049138.D | Misc: | |
| Instrument: | FID_D | ALS Vial: | 51 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aromatic C10-C12 | 4.076 | 5.794 | 0 | 0 | 200 | ug/ml |
| Aromatic C12-C16 | 5.795 | 8.396 | 0 | 0 | 300 | ug/ml |
| Aromatic C16-C21 | 8.397 | 12.661 | 0 | 0 | 500 | ug/ml |
| Aromatic C21-C36 | 12.662 | 18.073 | 0 | 0 | 800 | ug/ml |
| Aromatic EPH | 4.076 | 18.073 | 0 | 0 | | ug/ml |
| 2-Bromonaphthalene (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |
| 2-Flurobiphenyl (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |
| ortho-Terphenyl (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022825AR\
Data File : FD049138.D
Signal(s) : FID2B.ch
Acq On : 28 Feb 2025 15:53
Operator : YP/AJ
Sample : I.BLK
Misc :
ALS Vial : 51 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
I.BLK

Integration File: autoint1.e
Quant Time: Mar 01 02:19:36 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

| Compound | R.T. | Response | Conc | Units |
|---|---|---|---|---|

System Monitoring Compounds

Target Compounds

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

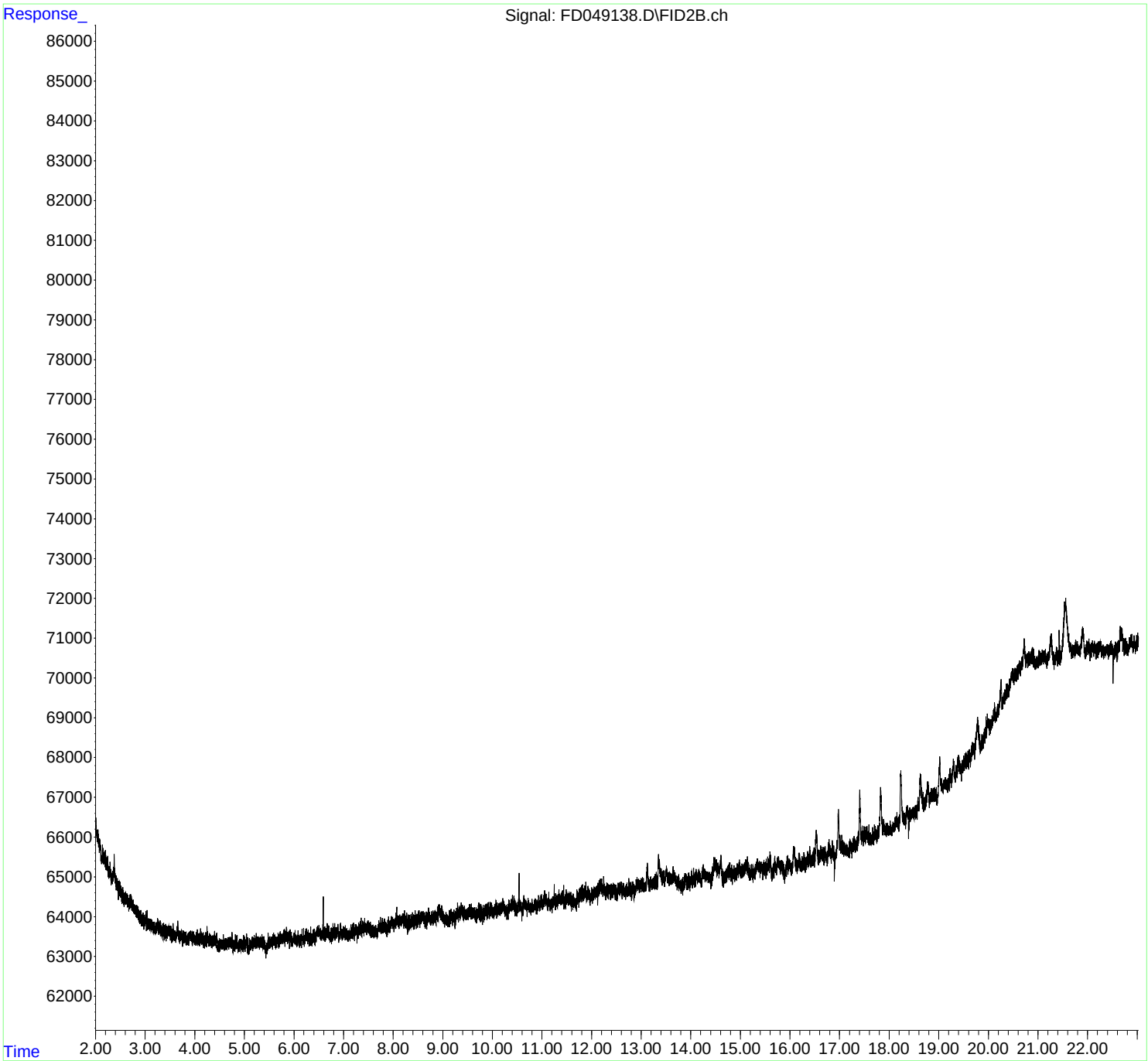
Quantitation Report (QT Reviewed)

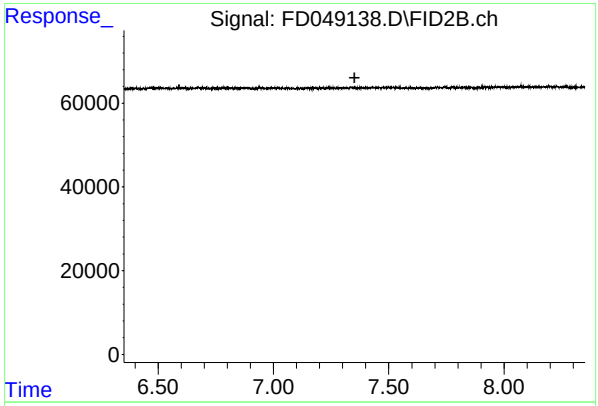
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022825AR\
Data File : FD049138.D
Signal(s) : FID2B.ch
Acq On : 28 Feb 2025 15:53
Operator : YP/AJ
Sample : I.BLK
Misc :
ALS Vial : 51 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
I.BLK

Integration File: autoint1.e
Quant Time: Mar 01 02:19:36 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

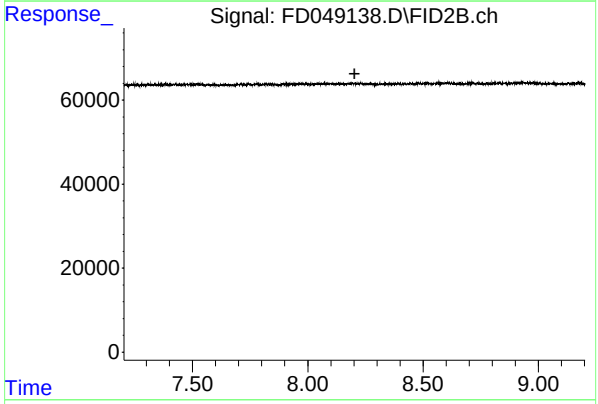





#4 2-Bromonaphthalene (SURR)

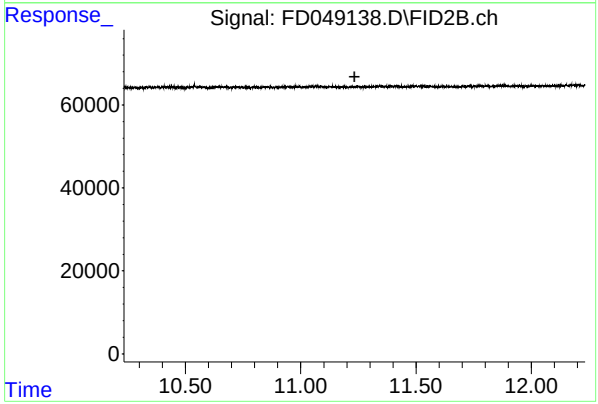
R.T.: 0.000 min
Exp R.T. : 7.351 min
Response: 0
Conc: N.D.

**Instrument :**
FID_D
**ClientSampleId :**
I.BLK




#6 2-Flurobiphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 8.202 min
Response: 0
Conc: N.D.




#11 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.233 min
Response: 0
Conc: N.D.

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022825AR\
Data File : FD049138.D
Signal(s) : FID2B.ch
Acq On : 28 Feb 2025 15:53
Sample : I.BLK
Misc :
ALS Vial : 51 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Title : GC Extractables

Signal : FID2B.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|

No peaks were detected!

Aromatic EPH 021125.M Sat Mar 01 03:55:42 2025

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

# Quantitation Report For Aromatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | I.BLK | Acq On: | 28 Feb 2025 23:13 |
| Client Sample ID: | I.BLK | Operator: | YP/AJ |
| Data file: | FD049148.D | Misc: | |
| Instrument: | FID_D | ALS Vial: | 51 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aromatic C10-C12 | 4.076 | 5.794 | 0 | 0 | 200 | ug/ml |
| Aromatic C12-C16 | 5.795 | 8.396 | 0 | 0 | 300 | ug/ml |
| Aromatic C16-C21 | 8.397 | 12.661 | 0 | 0 | 500 | ug/ml |
| Aromatic C21-C36 | 12.662 | 18.073 | 0 | 0 | 800 | ug/ml |
| Aromatic EPH | 4.076 | 18.073 | 0 | 0 | | ug/ml |
| 2-Bromonaphthalene (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |
| 2-Flurobiphenyl (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |
| ortho-Terphenyl (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022825AR\
Data File : FD049148.D
Signal(s) : FID2B.ch
Acq On : 28 Feb 2025 23:13
Operator : YP/AJ
Sample : I.BLK
Misc :
ALS Vial : 51 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
I.BLK

Integration File: autoint1.e
Quant Time: Mar 01 02:23:40 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

| Compound | R.T. | Response | Conc | Units |
|---|---|---|---|---|

System Monitoring Compounds

Target Compounds

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

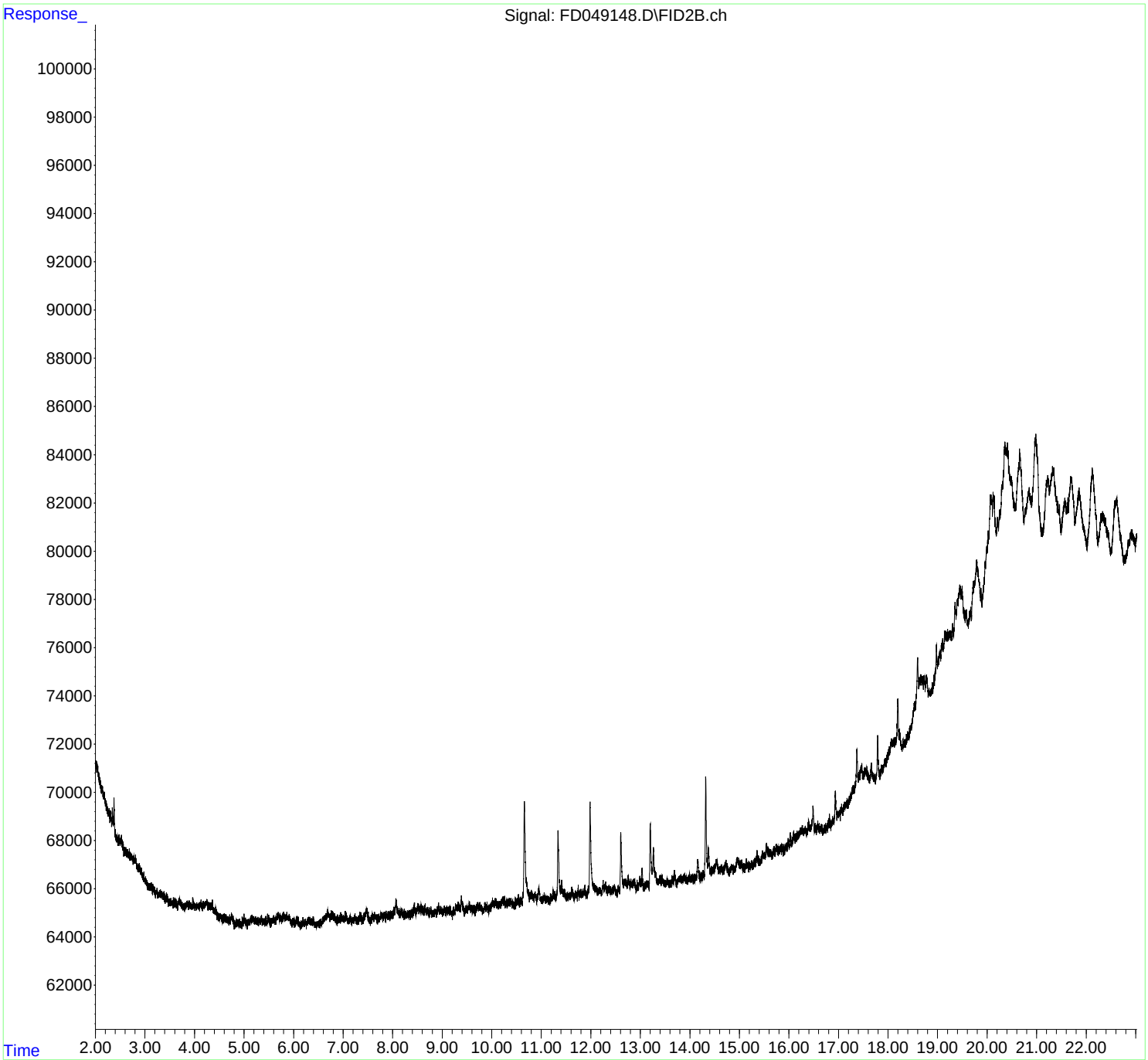
Quantitation Report (QT Reviewed)

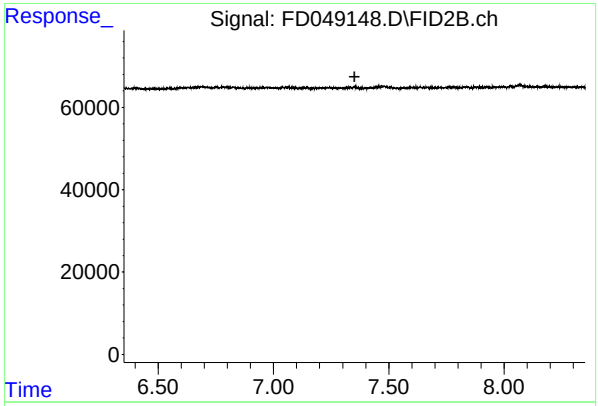
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022825AR\
Data File : FD049148.D
Signal(s) : FID2B.ch
Acq On : 28 Feb 2025 23:13
Operator : YP/AJ
Sample : I.BLK
Misc :
ALS Vial : 51 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
I.BLK

Integration File: autoint1.e
Quant Time: Mar 01 02:23:40 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

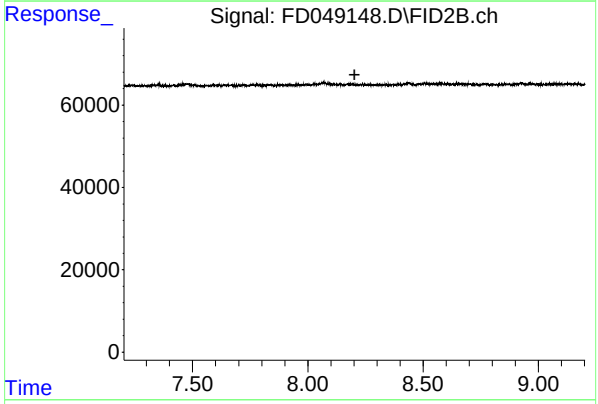





#4 2-Bromonaphthalene (SURR)

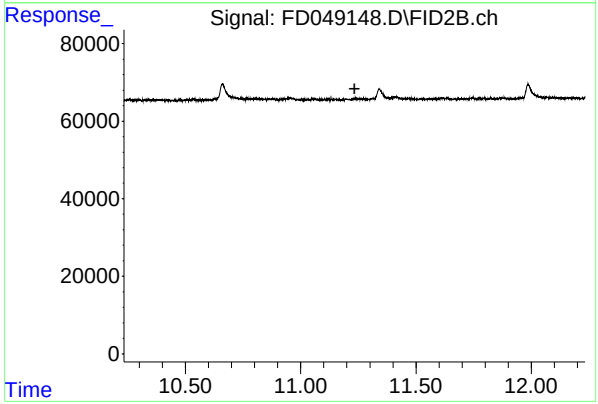
R.T.: 0.000 min
Exp R.T. : 7.351 min
Response: 0
Conc: N.D.

**Instrument :**
FID_D
**ClientSampleId :**
I.BLK




#6 2-Flurobiphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 8.202 min
Response: 0
Conc: N.D.




#11 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.233 min
Response: 0
Conc: N.D.

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022825AR\
Data File : FD049148.D
Signal(s) : FID2B.ch
Acq On : 28 Feb 2025 23:13
Sample : I.BLK
Misc :
ALS Vial : 51 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Title : GC Extractables

Signal : FID2B.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|

No peaks were detected!

Aromatic EPH 021125.M Sat Mar 01 03:56:26 2025

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Weston Solutions, Inc. | Date Collected: | |
| Project: | RFP 905 | Date Received: | |
| Client Sample ID: | PB166883BS | SDG No.: | Q1421 |
| Lab Sample ID: | PB166883BS | Matrix: | Water |
| Analytical Method: | NJEPH | % Solid: | 0 |
| Sample Wt/Vol: | 1000 Units: mL | Final Vol: | 2000 uL |
| Soil Aliquot Vol: | uL | Test: | EPH |
| Prep Method : | SW3510 | | |

| Prep Date : | Date Analyzed : | Prep Batch ID |
|---|---|---|
| 02/26/25 11:45 | 02/27/25 11:02 | PB166883 |

| CAS Number | Parameter | Conc. | Qualifier | Dilution | MDL | LOQ / CRQL | Units | Datafile |
|---|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | | |
| Aliphatic C9-C12 | Aliphatic C9-C12 | 195 | | 1 | 5.76 | 30.0 | ug/l | FC068307.D |
| Aliphatic C12-C16 | Aliphatic C12-C16 | 179 | | 1 | 3.61 | 20.0 | ug/l | FC068307.D |
| Aliphatic C16-C21 | Aliphatic C16-C21 | 306 | | 1 | 5.14 | 30.0 | ug/l | FC068307.D |
| Aliphatic C21-C28 | Aliphatic C21-C28 | 416 | | 1 | 8.97 | 40.0 | ug/l | FC068307.D |
| Aliphatic C28-C40 | Aliphatic C28-C40 | 688 | | 1 | 17.0 | 60.0 | ug/l | FC068307.D |
| Aromatic C10-C12 | Aromatic C10-C12 | 205 | | 1 | 3.32 | 20.0 | ug/l | FD049116.D |
| Aromatic C12-C16 | Aromatic C12-C16 | 352 | | 1 | 3.69 | 30.0 | ug/l | FD049116.D |
| Aromatic C16-C21 | Aromatic C16-C21 | 679 | | 1 | 12.7 | 50.0 | ug/l | FD049116.D |
| Aromatic C21-C36 | Aromatic C21-C36 | 1070 | | 1 | 25.2 | 80.0 | ug/l | FD049116.D |
| Total AliphaticEPH | Total AliphaticEPH | 1780 | | | 40.5 | 180 | ug/l | |
| Total AromaticEPH | Total AromaticEPH | 2300 | | | 44.9 | 180 | ug/l | |
| Total EPH | Total EPH | 4090 | | | 85.4 | 360 | ug/l | |

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control 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

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

# Report of Analysis

| | | | | | |
|---|---|---|---|---|---|
| Client: | Weston Solutions, Inc. | | Date Collected: | | |
| Project: | RFP 905 | | Date Received: | | |
| Client Sample ID: | PB166883BS | | SDG No.: | Q1421 | |
| Lab Sample ID: | PB166883BS | | Matrix: | Water | |
| Analytical Method: | NJEPH | | % Solid: | 0 | |
| Sample Wt/Vol: | 1000 Units: | mL | Final Vol: | 2000 | uL |
| Soil Aliquot Vol: | | uL | Test: | EPH | |
| Prep Method : | SW3510 | | | | |

| File ID : | Dilution: | Prep Date : | Date Analyzed : | Prep Batch ID |
|---|---|---|---|---|
| FC068307.D | 1 | 02/26/25 | 02/27/25 | PB166883 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| Aliphatic C9-C12 | Aliphatic C9-C12 | 195 | | 5.76 | 30.0 | ug/l |
| Aliphatic C12-C16 | Aliphatic C12-C16 | 179 | | 3.61 | 20.0 | ug/l |
| Aliphatic C16-C21 | Aliphatic C16-C21 | 306 | | 5.14 | 30.0 | ug/l |
| Aliphatic C21-C28 | Aliphatic C21-C28 | 416 | | 8.97 | 40.0 | ug/l |
| Aliphatic C28-C40 | Aliphatic C28-C40 | 688 | | 17.0 | 60.0 | ug/l |
| **SURROGATES** | | | | | | |
| 3383-33-2 | 1-chlorooctadecane (SURR) | 40.5 | | 40 - 140 | 81% | SPK: 50 |
| 84-15-1 | ortho-Terphenyl (SURR) | 0.00 | | 40 - 140 | 0% | SPK: 50 |

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

# Quantitation Report For Aliphatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | PB166883BS | Acq On: | 27 Feb 2025 11:02 |
| Client Sample ID: | PB166883BS | Operator: | YP/AJ |
| Data file: | FC068307.D | Misc: | |
| Instrument: | FID_C | ALS Vial: | 12 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aliphatic C9-C12 | 3.104 | 6.370 | 13819500 | 97.986 | 300 | ug/ml |
| Aliphatic C12-C16 | 6.371 | 9.754 | 12247337 | 89.623 | 200 | ug/ml |
| Aliphatic C16-C21 | 9.755 | 13.108 | 20168700 | 153.222 | 300 | ug/ml |
| Aliphatic C21-C28 | 13.109 | 16.762 | 25554244 | 208.281 | 400 | ug/ml |
| Aliphatic C28-C40 | 16.763 | 21.566 | 35379735 | 344.005 | 600 | ug/ml |
| Aliphatic EPH | 3.104 | 21.566 | 107169516 | 893.116 | | ug/ml |
| ortho-Terphenyl (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |
| 1-chlorooctadecane (SURR) | 12.842 | 12.842 | 4552150 | 40.47 | | ug/ml |
| Aliphatic C9-C28 | 3.104 | 16.762 | 71789781 | 549.112 | 1200 | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022725AL\
Data File : FC068307.D
Signal(s) : FID1A.ch
Acq On : 27 Feb 2025 11:02
Operator : YP/AJ
Sample : PB166883BS
Misc :
ALS Vial : 12 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
PB166883BS

Integration File: autoint1.e
Quant Time: Mar 05 04:43:23 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

| | Compound | R.T. | Response | Conc Units |
|---|---|---|---|---|
| | **System Monitoring Compounds** | | | |
| 12) S | 1-chlorooctadecane (S... | 12.842 | 4552150 | 40.473 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 80.95% |
| | **Target Compounds** | | | |
| 1) T | n-Nonane (C9) | 3.205 | 3754997 | 26.692 ug/ml |
| 2) T | n-Decane (C10) | 4.262 | 4697721 | 33.159 ug/ml |
| 4) T | n-Dodecane (C12) | 6.271 | 5366782 | 38.128 ug/ml |
| 6) T | n-Tetradecane (C14) | 8.060 | 5912885 | 43.368 ug/ml |
| 7) T | n-Hexadecane (C16) | 9.657 | 6334452 | 46.249 ug/ml |
| 8) T | n-Octadecane (C18) | 11.095 | 6639069 | 48.546 ug/ml |
| 10) T | n-Eicosane (C20) | 12.402 | 6912188 | 53.054 ug/ml |
| 11) T | n-Heneicosane (C21) | 13.013 | 6617443 | 51.760 ug/ml |
| 13) T | n-Docosane (C22) | 13.599 | 6575612 | 52.176 ug/ml |
| 14) T | n-Tetracosane (C24) | 14.698 | 6459568 | 51.935 ug/ml |
| 15) T | n-Hexacosane (C26) | 15.718 | 6321600 | 51.990 ug/ml |
| 16) T | n-Octacosane (C28) | 16.665 | 6147602 | 51.762 ug/ml |
| 17) T | n-Tricontane (C30) | 17.553 | 6105219 | 50.722 ug/ml |
| 18) T | n-Dotriacontane (C32) | 18.385 | 6035744 | 52.002 ug/ml |
| 19) T | n-Tetratriacontane (C34) | 19.167 | 6066026 | 56.136 ug/ml |
| 20) T | n-Hexatriacontane (C36) | 19.907 | 5815276 | 60.469 ug/ml |
| 21) T | n-Octatriacontane (C38) | 20.617 | 5646485 | 62.810 ug/ml |
| 22) T | n-Tetracontane (C40) | 21.473 | 5462282 | 63.133 ug/ml |

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

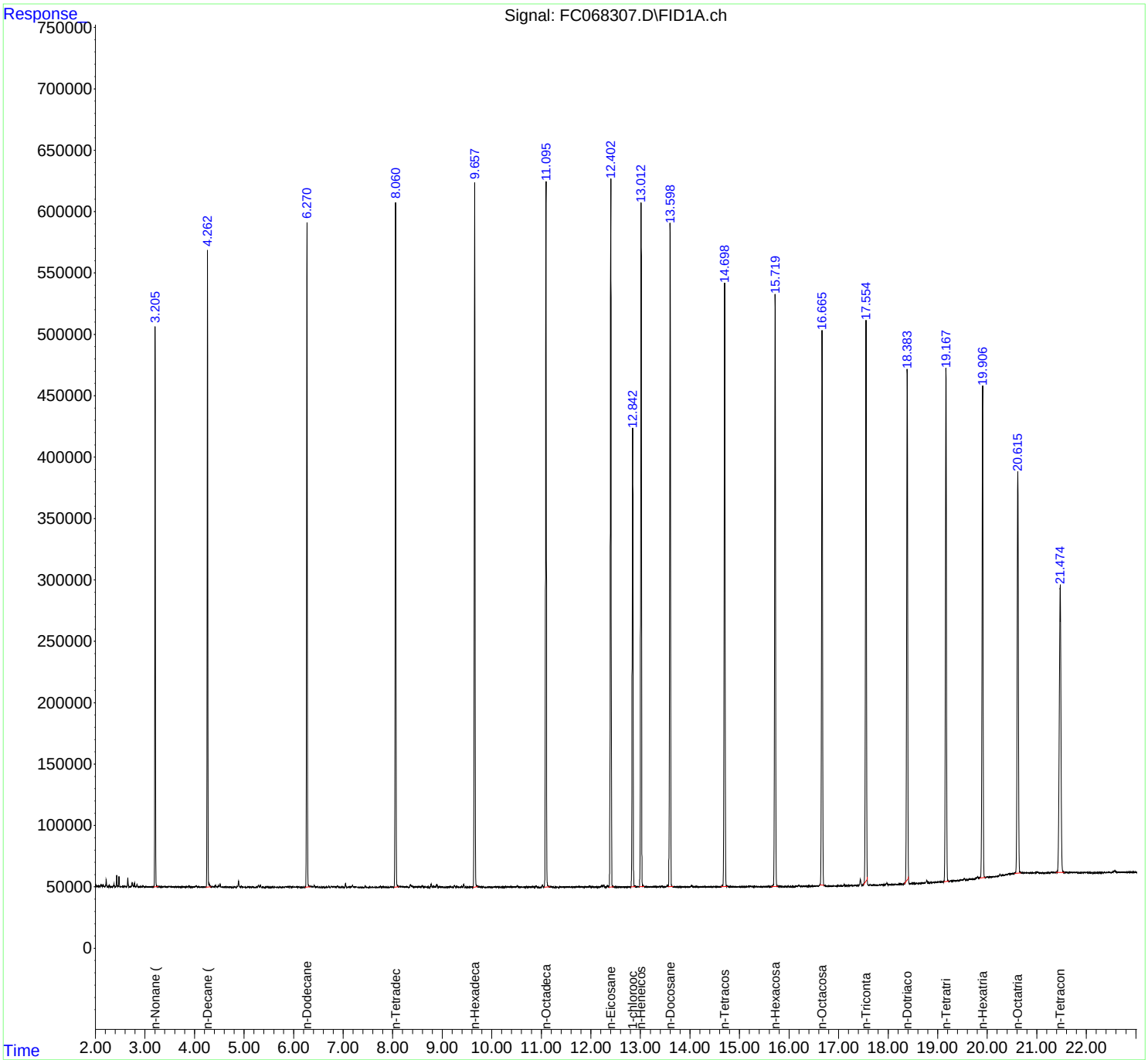
Quantitation Report (QT Reviewed)

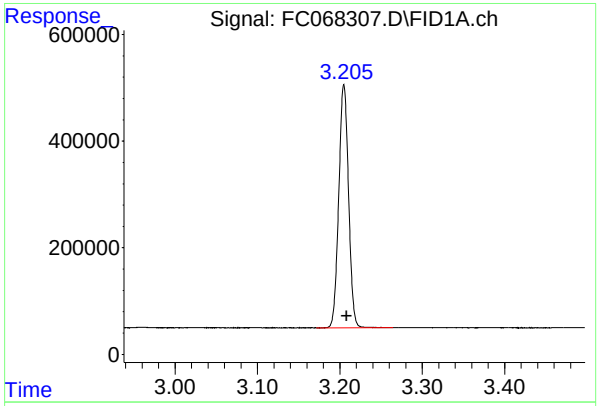
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022725AL\
Data File : FC068307.D
Signal(s) : FID1A.ch
Acq On : 27 Feb 2025 11:02
Operator : YP/AJ
Sample : PB166883BS
Misc :
ALS Vial : 12 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
PB166883BS

Integration File: autoint1.e
Quant Time: Mar 05 04:43:23 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

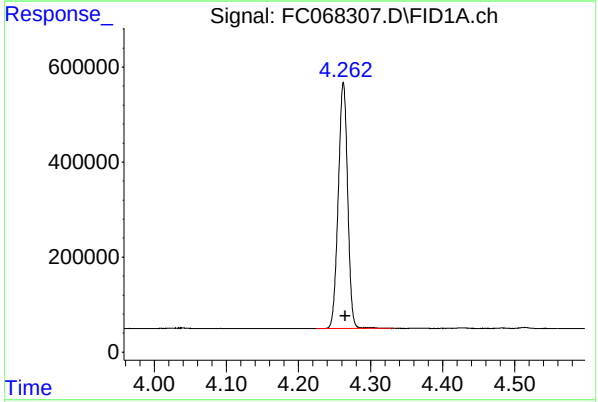





#1 n-Nonane (C9)

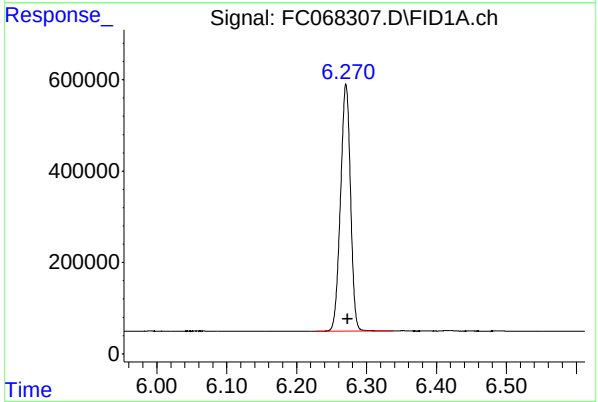
R.T.: 3.205 min
Delta R.T.: -0.003 min
Response: 3754997
Conc: 26.69 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
PB166883BS



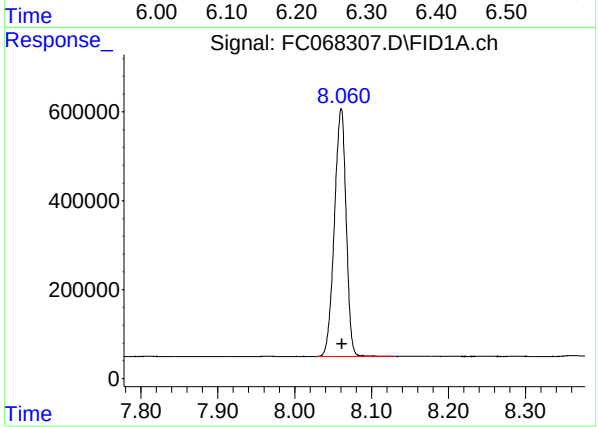

#2 n-Decane (C10)

R.T.: 4.262 min
Delta R.T.: -0.003 min
Response: 4697721
Conc: 33.16 ug/ml



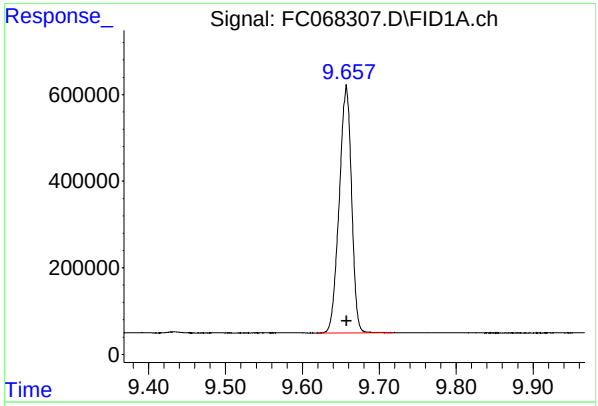

#4 n-Dodecane (C12)

R.T.: 6.271 min
Delta R.T.: -0.002 min
Response: 5366782
Conc: 38.13 ug/ml




#6 n-Tetradecane (C14)

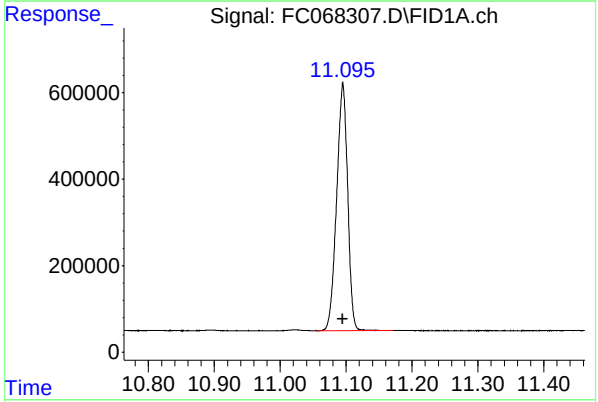
R.T.: 8.060 min
Delta R.T.: -0.002 min
Response: 5912885
Conc: 43.37 ug/ml




#7 n-Hexadecane (C16)

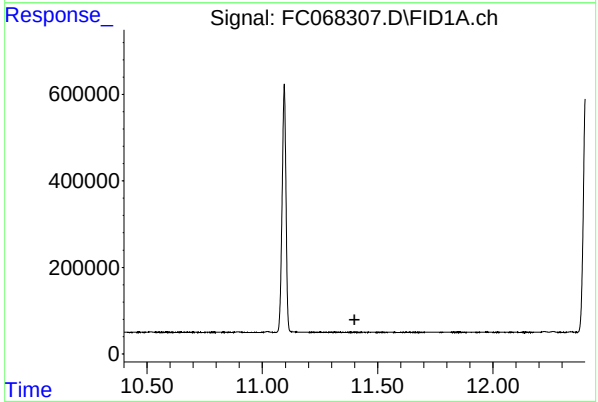
R.T.: 9.657 min
Delta R.T.: 0.000 min
Response: 6334452
Conc: 46.25 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
PB166883BS



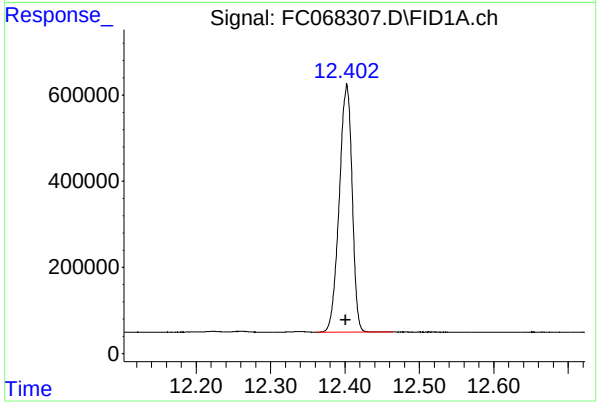

#8 n-Octadecane (C18)

R.T.: 11.095 min
Delta R.T.: 0.000 min
Response: 6639069
Conc: 48.55 ug/ml



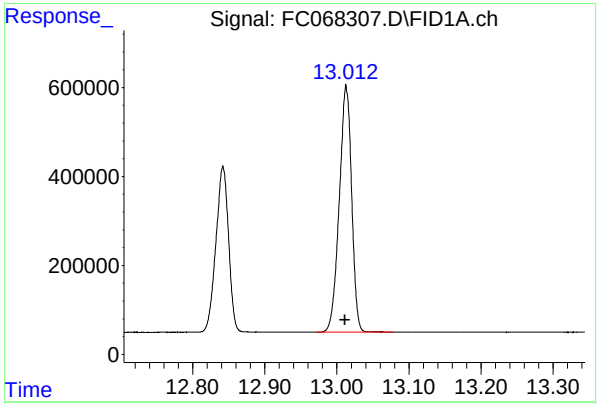

#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.400 min
Response: 0
Conc: N.D.




#10 n-Eicosane (C20)

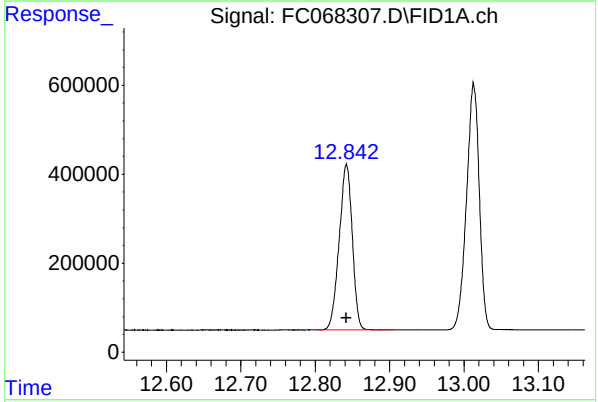
R.T.: 12.402 min
Delta R.T.: 0.001 min
Response: 6912188
Conc: 53.05 ug/ml




#11 n-Heneicosane (C21)

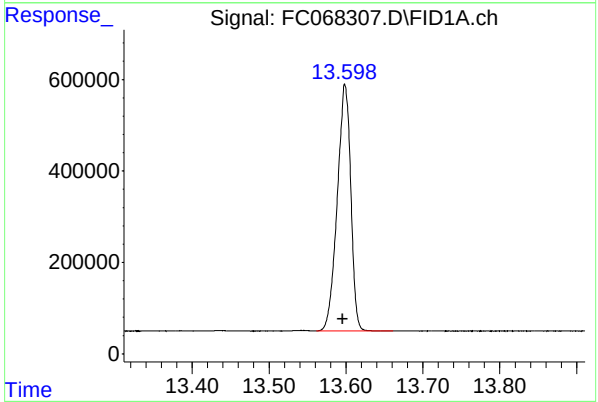
R.T.: 13.013 min
Delta R.T.: 0.002 min
Response: 6617443
Conc: 51.76 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
PB166883BS



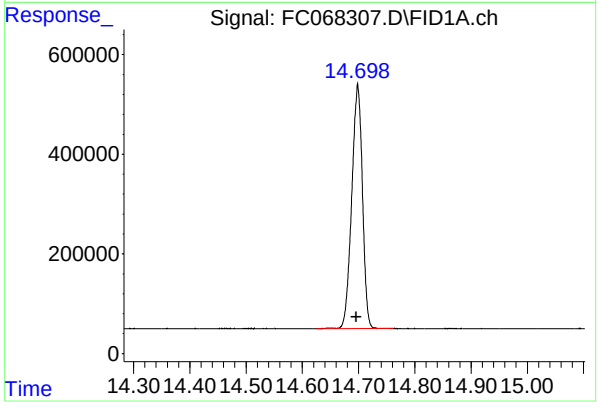

#12 1-chlorooctadecane (SURR)

R.T.: 12.842 min
Delta R.T.: 0.000 min
Response: 4552150
Conc: 40.47 ug/ml



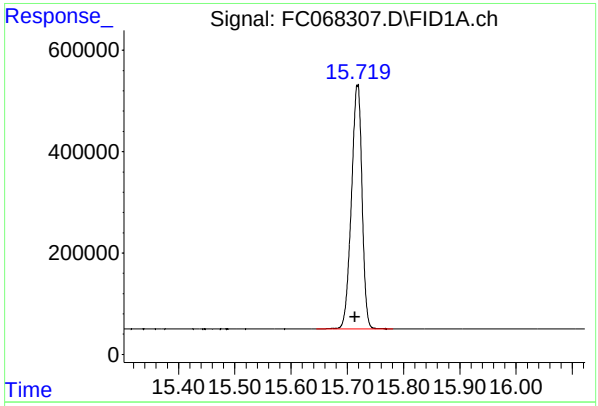

#13 n-Docosane (C22)

R.T.: 13.599 min
Delta R.T.: 0.003 min
Response: 6575612
Conc: 52.18 ug/ml




#14 n-Tetracosane (C24)

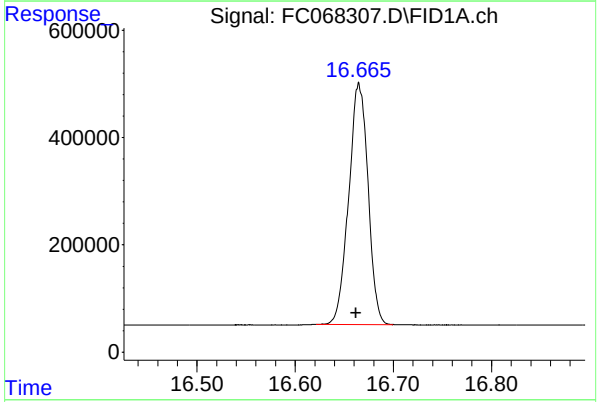
R.T.: 14.698 min
Delta R.T.: 0.002 min
Response: 6459568
Conc: 51.94 ug/ml




#15 n-Hexacosane (C26)

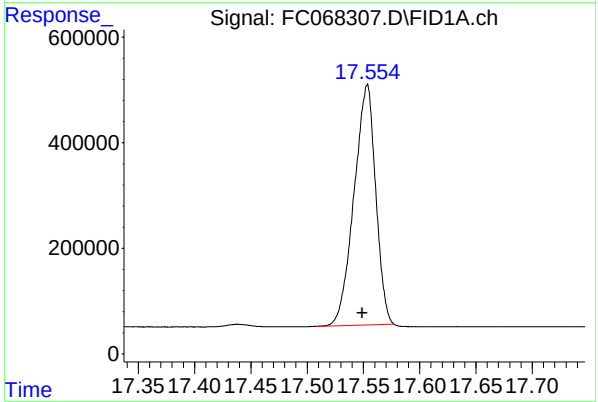
R.T.: 15.718 min
Delta R.T.: 0.004 min
Response: 6321600
Conc: 51.99 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
PB166883BS



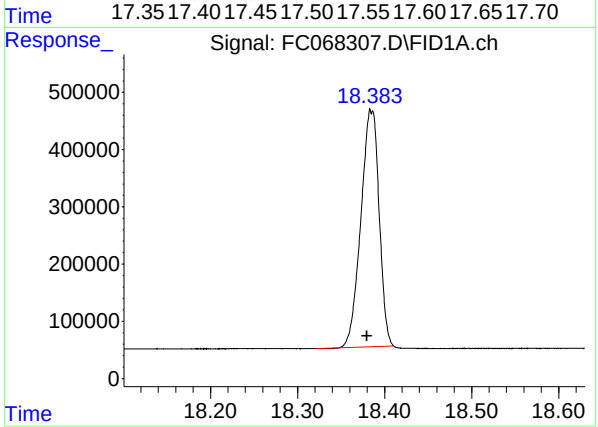

#16 n-Octacosane (C28)

R.T.: 16.665 min
Delta R.T.: 0.003 min
Response: 6147602
Conc: 51.76 ug/ml



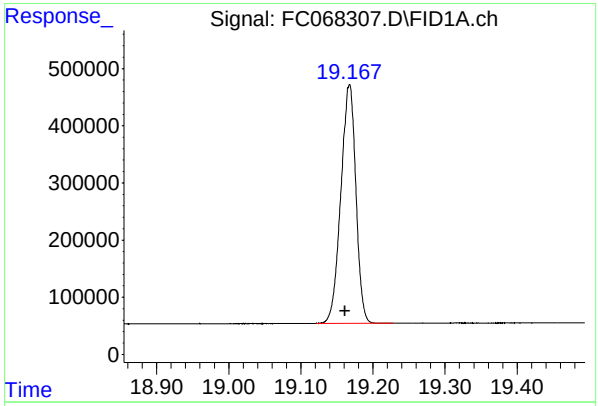

#17 n-Tricontane (C30)

R.T.: 17.553 min
Delta R.T.: 0.004 min
Response: 6105219
Conc: 50.72 ug/ml




#18 n-Dotriacontane (C32)

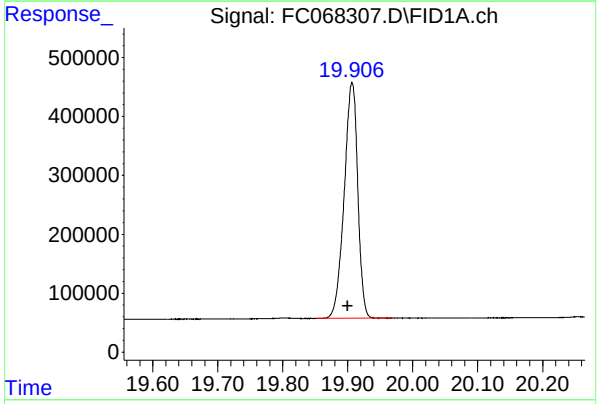
R.T.: 18.385 min
Delta R.T.: 0.005 min
Response: 6035744
Conc: 52.00 ug/ml




#19 n-Tetratriacontane (C34)

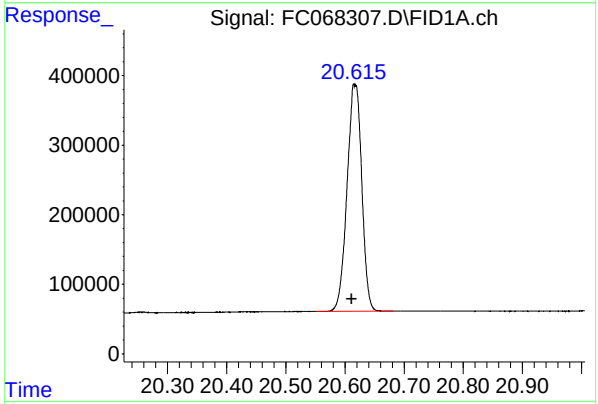
R.T.: 19.167 min
Delta R.T.: 0.006 min
Response: 6066026
Conc: 56.14 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
PB166883BS



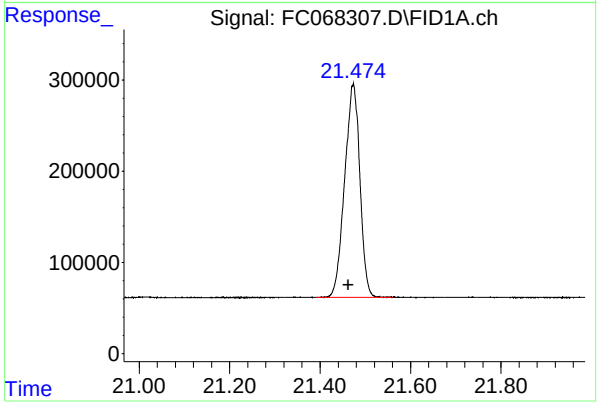

#20 n-Hexatriacontane (C36)

R.T.: 19.907 min
Delta R.T.: 0.006 min
Response: 5815276
Conc: 60.47 ug/ml




#21 n-Octatriacontane (C38)

R.T.: 20.617 min
Delta R.T.: 0.006 min
Response: 5646485
Conc: 62.81 ug/ml




#22 n-Tetracontane (C40)

R.T.: 21.473 min
Delta R.T.: 0.011 min
Response: 5462282
Conc: 63.13 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022725AL\
Data File : FC068307.D
Signal(s) : FID1A.ch
Acq On : 27 Feb 2025 11:02
Sample : PB166883BS
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Title : GC Extractables

Signal : FID1A.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 3.205 | 3.171 | 3.265 | BB | 455418 | 3754997 | 54.32% | 3.361% |
| 2 | 4.262 | 4.224 | 4.331 | BB | 514345 | 4697721 | 67.96% | 4.205% |
| 3 | 6.271 | 6.228 | 6.338 | BB | 540975 | 5366782 | 77.64% | 4.804% |
| 4 | 8.060 | 8.028 | 8.128 | BB | 564427 | 5912885 | 85.54% | 5.293% |
| 5 | 9.657 | 9.618 | 9.718 | BB | 567479 | 6334452 | 91.64% | 5.670% |
| 6 | 11.095 | 11.055 | 11.171 | BB | 566758 | 6639069 | 96.05% | 5.943% |
| 7 | 12.402 | 12.361 | 12.465 | PB | 566255 | 6912188 | 100.00% | 6.187% |
| 8 | 12.842 | 12.801 | 12.905 | BB | 371601 | 4552150 | 65.86% | 4.075% |
| 9 | 13.013 | 12.971 | 13.078 | BB | 548102 | 6617443 | 95.74% | 5.923% |
| 10 | 13.599 | 13.561 | 13.661 | BB | 539759 | 6575612 | 95.13% | 5.886% |
| 11 | 14.698 | 14.625 | 14.761 | BB | 484959 | 6459568 | 93.45% | 5.782% |
| 12 | 15.718 | 15.645 | 15.781 | BB | 483444 | 6321600 | 91.46% | 5.658% |
| 13 | 16.665 | 16.598 | 16.731 | BB | 448027 | 6197464 | 89.66% | 5.547% |
| 14 | 17.553 | 17.481 | 17.611 | BB | 465416 | 6234731 | 90.20% | 5.581% |
| 15 | 18.385 | 18.321 | 18.454 | BB | 415915 | 6154935 | 89.04% | 5.509% |
| 16 | 19.167 | 19.121 | 19.228 | BB | 419314 | 6066026 | 87.76% | 5.430% |
| 17 | 19.907 | 19.851 | 19.970 | BBA | 402099 | 5815276 | 84.13% | 5.205% |
| 18 | 20.617 | 20.551 | 20.681 | BB | 324985 | 5646485 | 81.69% | 5.054% |
| 19 | 21.473 | 21.391 | 21.561 | BB | 234349 | 5462282 | 79.02% | 4.889% |

Sum of corrected areas: 111721664

Aliphatic EPH 021125.M Fri Feb 28 01:08:30 2025

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

# Report of Analysis

| | | | | | |
|---|---|---|---|---|---|
| Client: | Weston Solutions, Inc. | | Date Collected: | | |
| Project: | RFP 905 | | Date Received: | | |
| Client Sample ID: | PB166883BS | | SDG No.: | Q1421 | |
| Lab Sample ID: | PB166883BS | | Matrix: | Water | |
| Analytical Method: | NJEPH | | % Solid: | 0 | |
| Sample Wt/Vol: | 1000 Units: | mL | Final Vol: | 2000 | uL |
| Soil Aliquot Vol: | | uL | Test: | EPH | |
| Prep Method : | SW3510 | | | | |

| File ID : | Dilution: | Prep Date : | Date Analyzed : | Prep Batch ID |
|---|---|---|---|---|
| FD049116.D | 1 | 02/26/25 | 02/27/25 | PB166883 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| Aromatic C10-C12 | Aromatic C10-C12 | 205 | | 3.32 | 20.0 | ug/l |
| Aromatic C12-C16 | Aromatic C12-C16 | 352 | | 3.69 | 30.0 | ug/l |
| Aromatic C16-C21 | Aromatic C16-C21 | 679 | | 12.7 | 50.0 | ug/l |
| Aromatic C21-C36 | Aromatic C21-C36 | 1070 | | 25.2 | 80.0 | ug/l |
| **SURROGATES** | | | | | | |
| 580-13-2 | 2-Bromonaphthalene (SURR) | 61.7 | | 40 - 140 | 123% | SPK: 50 |
| 321-60-8 | 2-Flurobiphenyl (SURR) | 65.5 | | 40 - 140 | 131% | SPK: 50 |
| 84-15-1 | ortho-Terphenyl (SURR) | 55.5 | | 40 - 140 | 111% | SPK: 50 |

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

# Quantitation Report For Aromatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | PB166883BS | Acq On: | 27 Feb 2025 11:02 |
| Client Sample ID: | PB166883BS | Operator: | YP/AJ |
| Data file: | FD049116.D | Misc: | |
| Instrument: | FID_D | ALS Vial: | 62 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aromatic C10-C12 | 4.076 | 5.794 | 16331007 | 102.697 | 200 | ug/ml |
| Aromatic C12-C16 | 5.795 | 8.397 | 28366957 | 176.262 | 300 | ug/ml |
| Aromatic C16-C21 | 8.398 | 12.661 | 52101012 | 339.732 | 500 | ug/ml |
| Aromatic C21-C36 | 12.662 | 18.071 | 76451006 | 534.194 | 800 | ug/ml |
| Aromatic EPH | 4.076 | 18.071 | 173249982 | 1150 | | ug/ml |
| 2-Bromonaphthalene (SURR) | 7.352 | 7.352 | 8834021 | 61.73 | | ug/ml |
| 2-Flurobiphenyl (SURR) | 8.203 | 8.203 | 5756944 | 65.49 | | ug/ml |
| ortho-Terphenyl (SURR) | 11.238 | 11.238 | 8978749 | 55.5 | | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022725AR\
Data File : FD049116.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2025 11:02
Operator : YP/AJ
Sample : PB166883BS
Misc :
ALS Vial : 62 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
PB166883BS

**Manual Integrations APPROVED**
Reviewed By :Yogesh Patel 02/28/2025
Supervised By :Ankita Jodhani 02/28/2025

Integration File: autoint1.e
Quant Time: Feb 28 01:25:41 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

| | Compound | R.T. | Response | Conc Units |
|---|---|---|---|---|
| | **System Monitoring Compounds** | | | |
| 4) | S 2-Bromonaphthalene (S... | 7.352 | 8834021 | 61.729 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 123.46% |
| 6) | S 2-Flurobiphenyl (SURR) | 8.203 | 5756944 | 65.485 ug/ml |
| Spiked Amount | 50.000 Range | 0 - 131 | Recovery = | 130.97% |
| 11) | S ortho-Terphenyl (SURR) | 11.238 | 8978749 | 55.502 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 111.00% |
| | **Target Compounds** | | | |
| 1) | T 1,2,3-Trimethylbenzen... | 4.177 | 7641372 | 47.982 ug/ml |
| 2) | T Naphthalene (C11.7) | 5.693 | 8689635 | 54.725 ug/ml |
| 3) | T 2-Methylnaphthalene (... | 6.740 | 8553154 | 54.936 ug/ml |
| 5) | T Acenaphthylene (C15.06) | 8.006 | 9684411 | 59.558 ug/ml |
| 7) | T Acenaphthene (C15.5) | 8.301 | 10129392 | 61.574 ug/ml |
| 8) | T Flouorene (C16.55) | 9.080 | 10213780 | 64.788 ug/ml |
| 9) | T Phenanthrene (C19.36) | 10.468 | 10318453 | 68.470 ug/ml |
| 10) | T Anthracene (C19.43) | 10.544 | 10577201 | 70.035 ug/ml |
| 12) | T Fluoranthene (C21.85) | 12.274 | 10612432 | 68.771 ug/ml |
| 13) | T Pyrene (C20.8) | 12.567 | 10379146 | 67.372 ug/ml |
| 14) | T Benzo[a]anthracene (C... | 14.438 | 9856625 | 75.018 ug/ml |
| 15) | T Chrysene (C27.41) | 14.480 | 9635857 | 59.596 ug/ml |
| 16) | T benzo[b]fluoranthene ... | 15.989 | 9789875 | 71.150 ug/ml |
| 17) | T Bnezo[k]fluoranthene ... | 16.024 | 10790161 | 68.317 ug/mlm |
| 18) | T Benzo[a]pyrene (C31.34) | 16.364 | 9428471 | 69.461 ug/ml |
| 19) | T Indeno[1,2,3-cd]pyren... | 17.734 | 9225906 | 84.427 ug/ml |
| 20) | T Dibenz[a,h]anthracene... | 17.768 | 9345045 | 60.236 ug/ml |
| 21) | T Benzo[g,h,i]perylene ... | 17.987 | 9321039 | 64.305 ug/ml |

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

Quantitation Report (QT Reviewed)

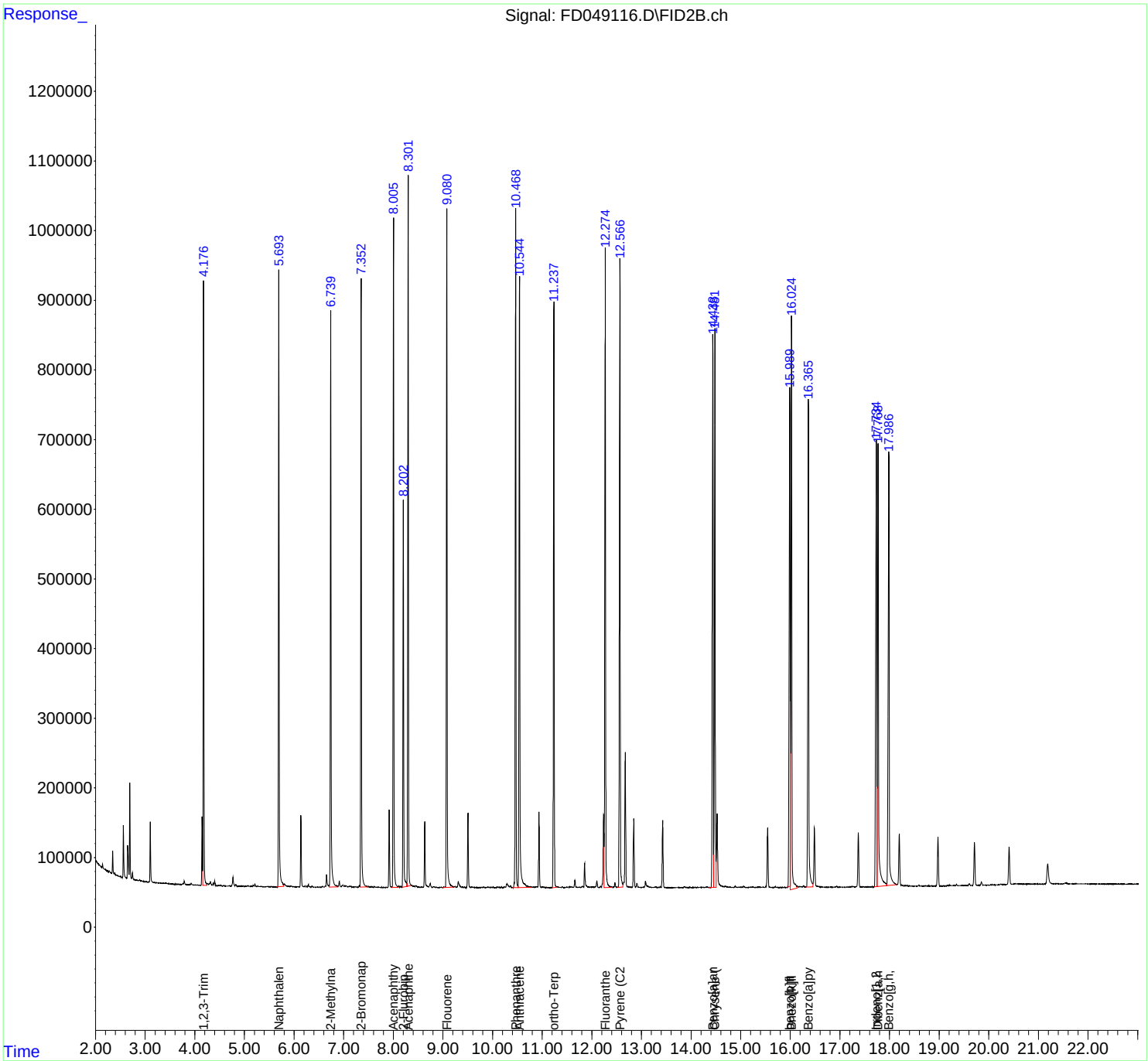
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022725AR\
Data File : FD049116.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2025 11:02
Operator : YP/AJ
Sample : PB166883BS
Misc :
ALS Vial : 62 Sample Multiplier: 1

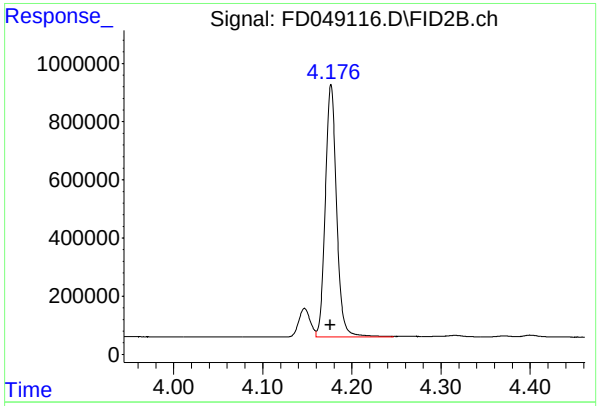
**Instrument :**
FID_D
**ClientSampleId :**
PB166883BS

**Manual Integrations APPROVED**
Reviewed By :Yogesh Patel 02/28/2025
Supervised By :Ankita Jodhani 02/28/2025

Integration File: autoint1.e
Quant Time: Feb 28 01:25:41 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm





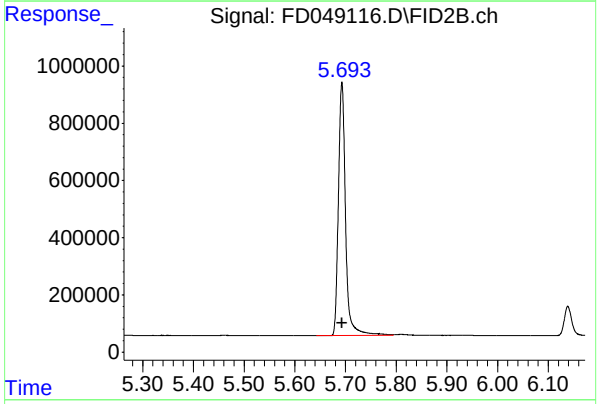

#1 1,2,3-Trimethylbenzene (C10.1)

R.T.: 4.177 min
Delta R.T.: 0.000 min
Response: 7641372
Conc: 47.98 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
PB166883BS

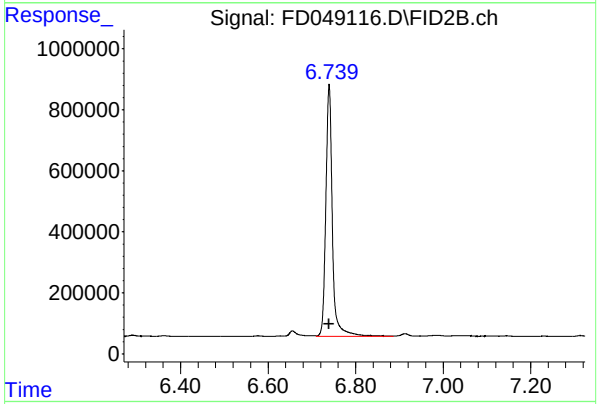
**Manual Integrations APPROVED**

Reviewed By :Yogesh Patel 02/28/2025
Supervised By :Ankita Jodhani 02/28/2025



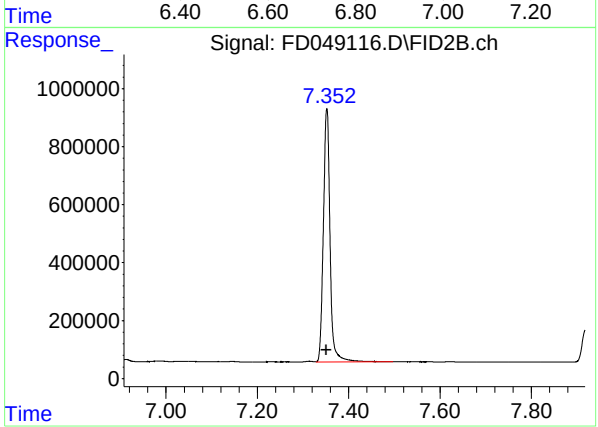

#2 Naphthalene (C11.7)

R.T.: 5.693 min
Delta R.T.: 0.000 min
Response: 8689635
Conc: 54.72 ug/ml



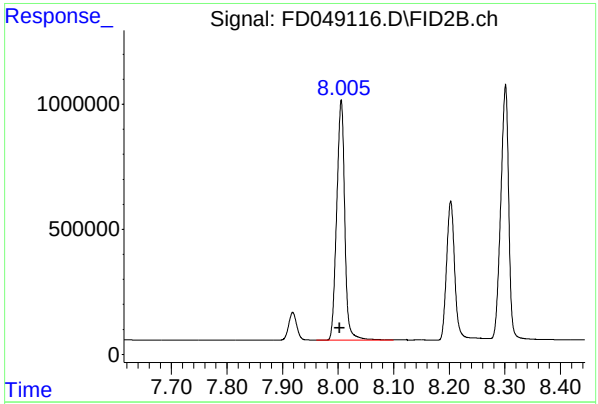

#3 2-Methylnaphthalene (C12.89)

R.T.: 6.740 min
Delta R.T.: 0.000 min
Response: 8553154
Conc: 54.94 ug/ml




#4 2-Bromonaphthalene (SURR)

R.T.: 7.352 min
Delta R.T.: 0.000 min
Response: 8834021
Conc: 61.73 ug/ml



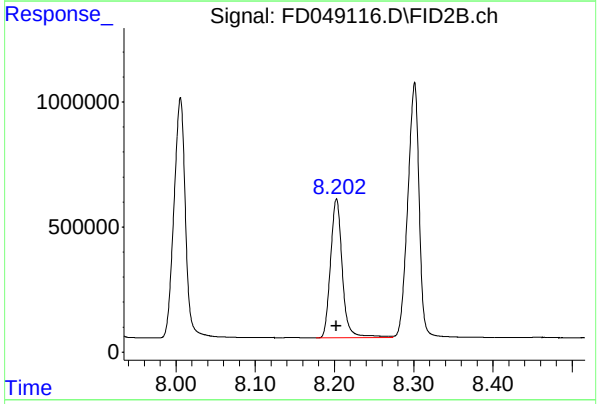

#5 Acenaphthylene (C15.06)

R.T.: 8.006 min
Delta R.T.: 0.003 min
Response: 9684411
Conc: 59.56 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
PB166883BS

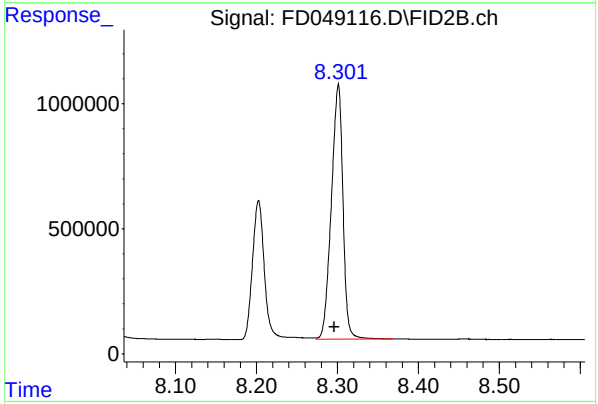
**Manual Integrations APPROVED**

Reviewed By :Yogesh Patel 02/28/2025
Supervised By :Ankita Jodhani 02/28/2025



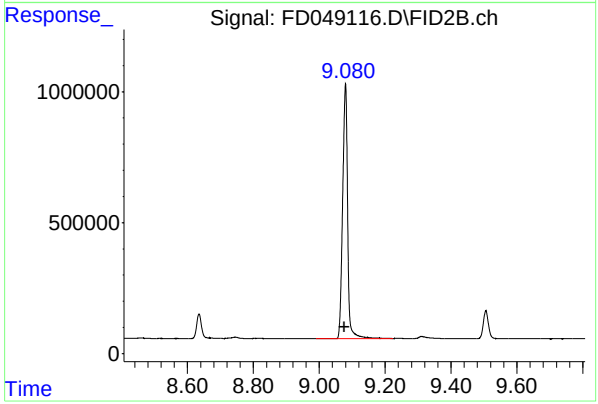

#6 2-Flurobiphenyl (SURR)

R.T.: 8.203 min
Delta R.T.: 0.000 min
Response: 5756944
Conc: 65.49 ug/ml



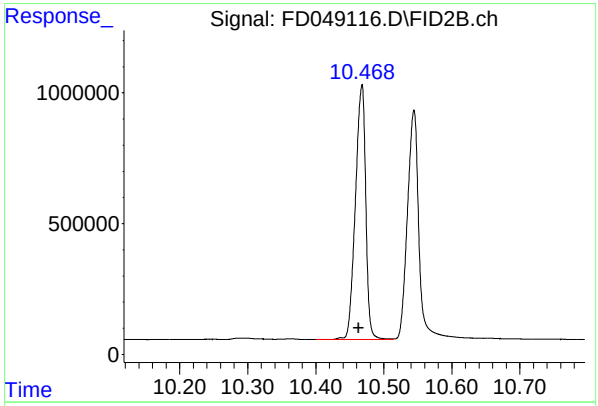

#7 Acenaphthene (C15.5)

R.T.: 8.301 min
Delta R.T.: 0.005 min
Response: 10129392
Conc: 61.57 ug/ml




#8 Flouorene (C16.55)

R.T.: 9.080 min
Delta R.T.: 0.004 min
Response: 10213780
Conc: 64.79 ug/ml



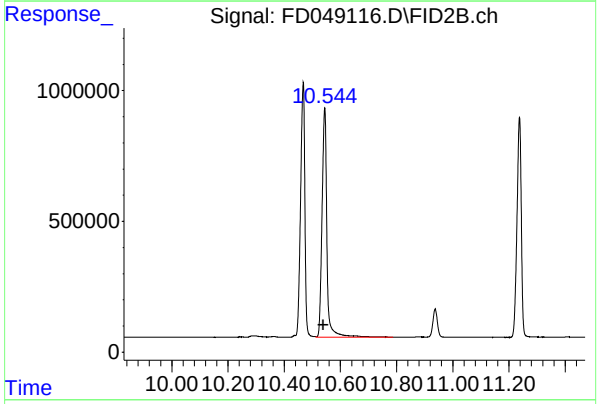

#9 Phenanthrene (C19.36)

R.T.: 10.468 min
Delta R.T.: 0.005 min
Response: 10318453
Conc: 68.47 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
PB166883BS

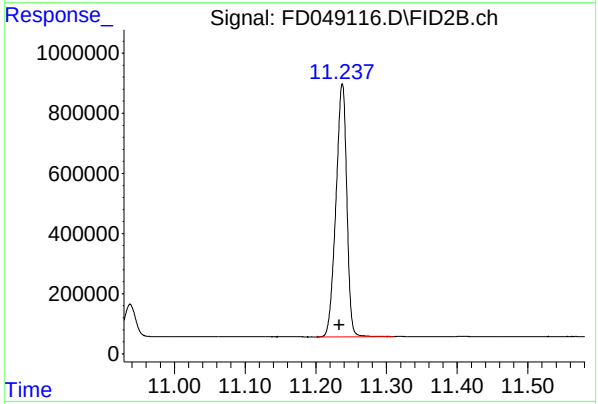
**Manual Integrations APPROVED**

Reviewed By :Yogesh Patel 02/28/2025
Supervised By :Ankita Jodhani 02/28/2025



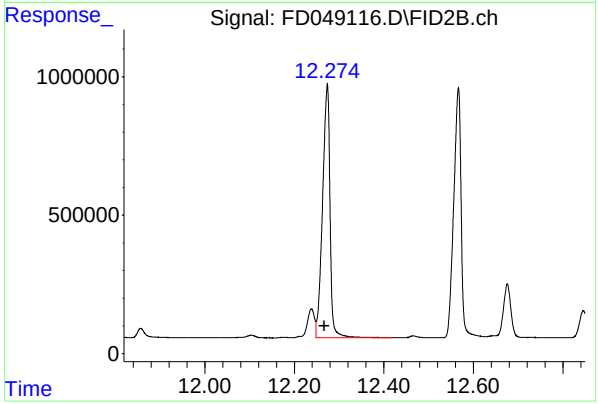

#10 Anthracene (C19.43)

R.T.: 10.544 min
Delta R.T.: 0.005 min
Response: 10577201
Conc: 70.03 ug/ml



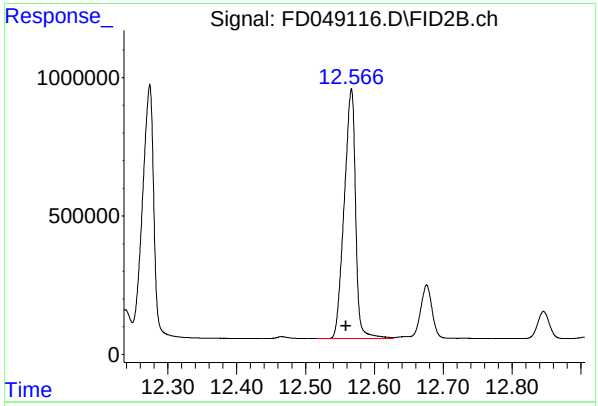

#11 ortho-Terphenyl (SURR)

R.T.: 11.238 min
Delta R.T.: 0.004 min
Response: 8978749
Conc: 55.50 ug/ml




#12 Fluoranthene (C21.85)

R.T.: 12.274 min
Delta R.T.: 0.007 min
Response: 10612432
Conc: 68.77 ug/ml



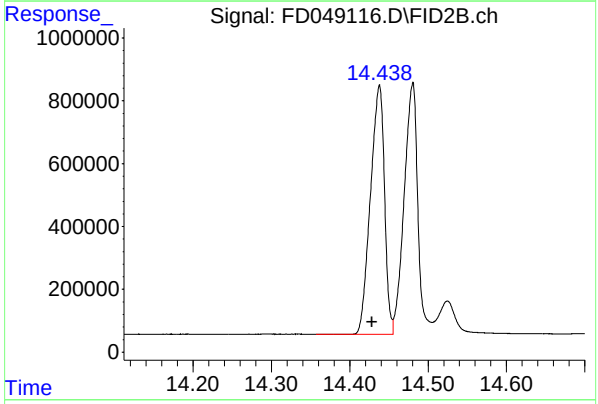

#13 Pyrene (C20.8)

R.T.: 12.567 min
Delta R.T.: 0.008 min
Response: 10379146
Conc: 67.37 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
PB166883BS

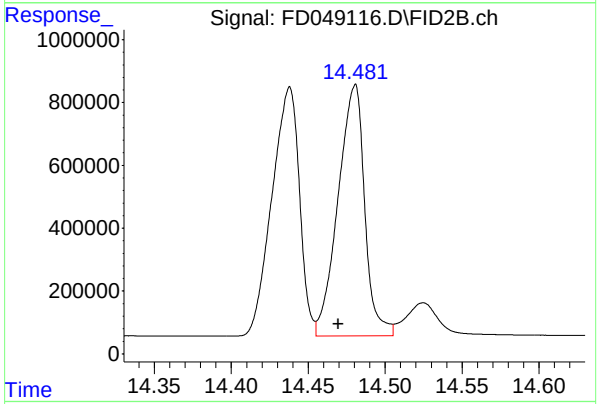
**Manual Integrations APPROVED**

Reviewed By :Yogesh Patel 02/28/2025
Supervised By :Ankita Jodhani 02/28/2025



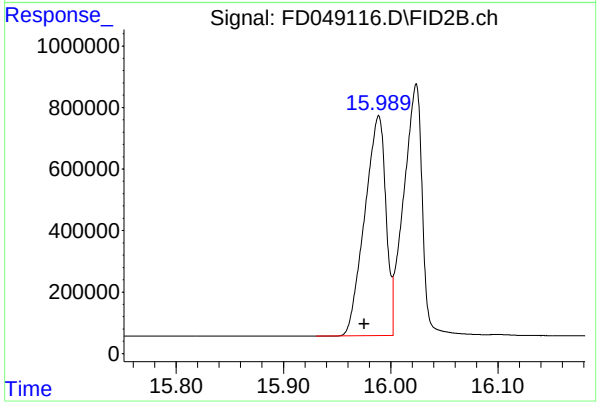

#14 Benzo[a]anthracene (C26.37)

R.T.: 14.438 min
Delta R.T.: 0.009 min
Response: 9856625
Conc: 75.02 ug/ml



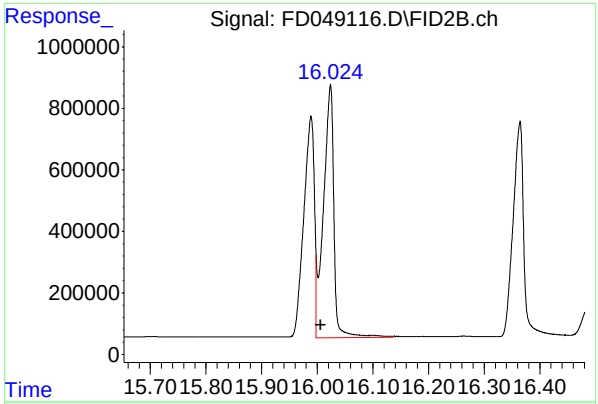

#15 Chrysene (C27.41)

R.T.: 14.480 min
Delta R.T.: 0.011 min
Response: 9635857
Conc: 59.60 ug/ml




#16 benzo[b]fluoranthene (C30.41)

R.T.: 15.989 min
Delta R.T.: 0.013 min
Response: 9789875
Conc: 71.15 ug/ml



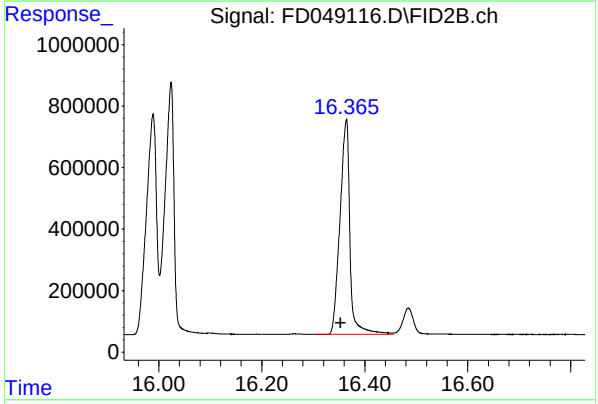

#17 Bnezo[k]fluoranthene (C30.14)

R.T.: 16.024 min
Delta R.T.: 0.017 min
Response: 10790161
Conc: 68.32 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
PB166883BS

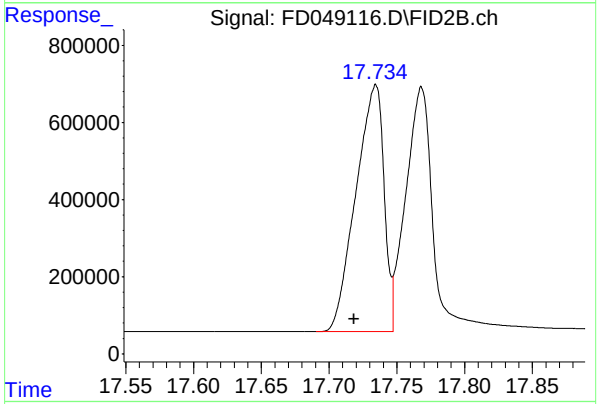
**Manual Integrations APPROVED**

Reviewed By :Yogesh Patel 02/28/2025
Supervised By :Ankita Jodhani 02/28/2025



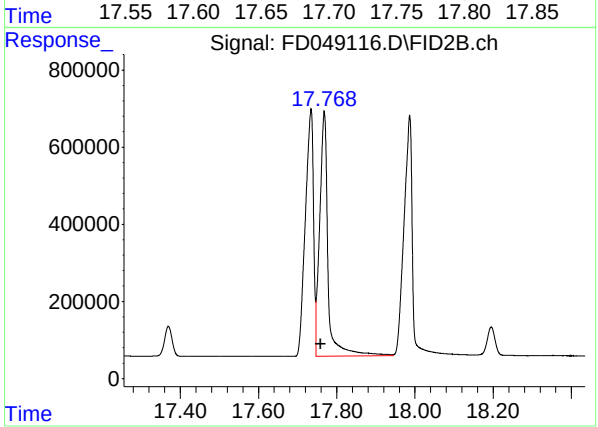

#18 Benzo[a]pyrene (C31.34)

R.T.: 16.364 min
Delta R.T.: 0.011 min
Response: 9428471
Conc: 69.46 ug/ml



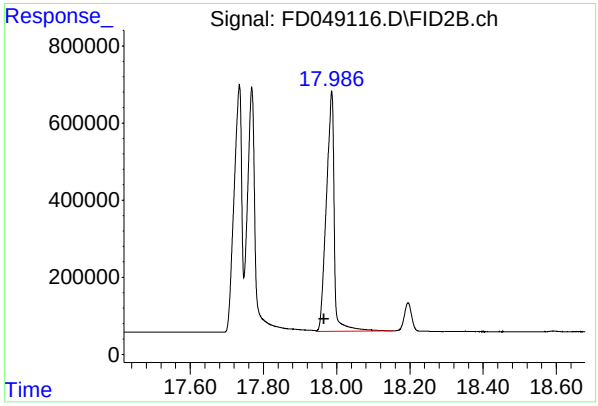

#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.734 min
Delta R.T.: 0.016 min
Response: 9225906
Conc: 84.43 ug/ml




#20 Dibenz[a,h]anthracene (C30.36)

R.T.: 17.768 min
Delta R.T.: 0.009 min
Response: 9345045
Conc: 60.24 ug/ml




#21 Benzo[g,h,i]perylene (C34.01)

R.T.: 17.987 min
Delta R.T.: 0.021 mi
Response: 9321039
Conc: 64.30 ug/m

**Instrument :**
FID_D
**ClientSampleId :**
PB166883BS

**Manual Integrations**
**APPROVED**

Reviewed By :Yogesh Patel 02/28/2025
Supervised By :Ankita Jodhani 02/28/2025

rteres

**Instrument :**
FID_D
**ClientSampleId :**
PB166883BS

Area Percent Report

**Manual IntegrationsAPPROVED**

Reviewed By :Yogesh Patel 02/28/2025
Supervised By :Ankita Jodhani 02/28/2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD02272
Data File : FD049116.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2025 11:02
Sample : PB166883BS
Misc :
ALS Vial : 62 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Title : GC Extractables

Signal : FID2B.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 4.177 | 4.160 | 4.246 | VV | 868070 | 7641372 | 72.00% | 3.882% |
| 2 | 5.693 | 5.642 | 5.794 | BV | 885636 | 8689635 | 81.88% | 4.415% |
| 3 | 6.740 | 6.710 | 6.885 | VV | 826354 | 8553154 | 80.60% | 4.346% |
| 4 | 7.352 | 7.329 | 7.497 | VB | 874447 | 8834021 | 83.24% | 4.488% |
| 5 | 8.006 | 7.960 | 8.099 | BV | 960593 | 9684411 | 91.26% | 4.920% |
| 6 | 8.203 | 8.177 | 8.274 | PV | 554950 | 5756944 | 54.25% | 2.925% |
| 7 | 8.301 | 8.274 | 8.369 | VV | 1023204 | 10129392 | 95.45% | 5.147% |
| 8 | 9.080 | 8.990 | 9.224 | BV | 976889 | 10213780 | 96.24% | 5.189% |
| 9 | 10.468 | 10.400 | 10.513 | BV | 983569 | 10318453 | 97.23% | 5.243% |
| 10 | 10.544 | 10.513 | 10.787 | VB | 875448 | 10577201 | 99.67% | 5.374% |
| 11 | 11.238 | 11.200 | 11.309 | BV | 841511 | 8978749 | 84.61% | 4.562% |
| 12 | 12.274 | 12.249 | 12.420 | VB | 916912 | 10612432 | 100.00% | 5.392% |
| 13 | 12.567 | 12.515 | 12.627 | BV | 903905 | 10379146 | 97.80% | 5.273% |
| 14 | 14.438 | 14.357 | 14.455 | BV | 795211 | 9856625 | 92.88% | 5.008% |
| 15 | 14.480 | 14.455 | 14.505 | VV | 798778 | 9635857 | 90.80% | 4.896% |
| 16 | 15.989 | 15.930 | 16.002 | BV | 714701 | 9789875 | 92.25% | 4.974% |
| 17 | 16.024 | 16.002 | 16.087 | VV | 817078 | 9848188 | 92.80% | 5.004% |
| 18 | 16.364 | 16.305 | 16.455 | BV | 696116 | 9428471 | 88.84% | 4.790% |
| 19 | 17.734 | 17.690 | 17.747 | BV | 638416 | 9225906 | 86.93% | 4.687% |
| 20 | 17.768 | 17.747 | 17.944 | VV | 633042 | 9345045 | 88.06% | 4.748% |
| 21 | 17.987 | 17.944 | 18.154 | VV | 621907 | 9321039 | 87.83% | 4.736% |

Sum of corrected areas: 196819694

Aromatic EPH 021125.M Fri Feb 28 01:58:15 2025

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Weston Solutions, Inc. | Date Collected: | |
| Project: | RFP 905 | Date Received: | |
| Client Sample ID: | PB166923BS | SDG No.: | Q1421 |
| Lab Sample ID: | PB166923BS | Matrix: | Solid |
| Analytical Method: | NJEPH | % Solid: | 100 |
| Sample Wt/Vol: | 30.03 Units: g | Final Vol: | 2000 uL |
| Soil Aliquot Vol: | uL | Test: | EPH |
| Prep Method : | | | |

| Prep Date : | Date Analyzed : | Prep Batch ID |
|---|---|---|
| 02/27/25 13:10 | 02/28/25 11:37 | PB166923 |

| CAS Number | Parameter | Conc. | Qualifier | Dilution | MDL | LOQ / CRQL | Units(Dry Weight) | Datafile |
|---|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | | |
| Aliphatic C9-C12 | Aliphatic C9-C12 | 6.53 | | 1 | 0.38 | 1.00 | mg/kg | FC068323.D |
| Aliphatic C12-C16 | Aliphatic C12-C16 | 5.75 | | 1 | 0.24 | 0.67 | mg/kg | FC068323.D |
| Aliphatic C16-C21 | Aliphatic C16-C21 | 9.57 | | 1 | 0.30 | 1.00 | mg/kg | FC068323.D |
| Aliphatic C21-C28 | Aliphatic C21-C28 | 12.9 | | 1 | 0.80 | 1.33 | mg/kg | FC068323.D |
| Aliphatic C28-C40 | Aliphatic C28-C40 | 21.3 | | 1 | 1.80 | 2.00 | mg/kg | FC068323.D |
| Aromatic C10-C12 | Aromatic C10-C12 | 6.49 | | 1 | 0.30 | 0.67 | mg/kg | FD049131.D |
| Aromatic C12-C16 | Aromatic C12-C16 | 11.1 | | 1 | 0.34 | 1.00 | mg/kg | FD049131.D |
| Aromatic C16-C21 | Aromatic C16-C21 | 21.5 | | 1 | 0.96 | 1.67 | mg/kg | FD049131.D |
| Aromatic C21-C36 | Aromatic C21-C36 | 34.3 | | 1 | 2.00 | 2.66 | mg/kg | FD049131.D |
| Total AliphaticEPH | Total AliphaticEPH | 56.0 | | | 3.52 | 5.99 | mg/kg | |
| Total AromaticEPH | Total AromaticEPH | 73.4 | | | 3.60 | 6.00 | mg/kg | |
| Total EPH | Total EPH | 129 | | | 7.12 | 12.0 | mg/kg | |

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control 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

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

# Report of Analysis

| | | | | | |
|---|---|---|---|---|---|
| Client: | Weston Solutions, Inc. | | Date Collected: | | |
| Project: | RFP 905 | | Date Received: | | |
| Client Sample ID: | PB166923BS | | SDG No.: | Q1421 | |
| Lab Sample ID: | PB166923BS | | Matrix: | Solid | |
| Analytical Method: | NJEPH | | % Solid: | 100 | |
| Sample Wt/Vol: | 30.03 | Units: g | Final Vol: | 2000 | uL |
| Soil Aliquot Vol: | | uL | Test: | EPH | |
| Prep Method : | | | | | |

| File ID : | Dilution: | Prep Date : | Date Analyzed : | Prep Batch ID |
|---|---|---|---|---|
| FC068323.D | 1 | 02/27/25 | 02/28/25 | PB166923 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| Aliphatic C9-C12 | Aliphatic C9-C12 | 6.53 | | 0.38 | 1.00 | mg/kg |
| Aliphatic C12-C16 | Aliphatic C12-C16 | 5.75 | | 0.24 | 0.67 | mg/kg |
| Aliphatic C16-C21 | Aliphatic C16-C21 | 9.57 | | 0.30 | 1.00 | mg/kg |
| Aliphatic C21-C28 | Aliphatic C21-C28 | 12.9 | | 0.80 | 1.33 | mg/kg |
| Aliphatic C28-C40 | Aliphatic C28-C40 | 21.3 | | 1.80 | 2.00 | mg/kg |
| **SURROGATES** | | | | | | |
| 3383-33-2 | 1-chlorooctadecane (SURR) | 38.9 | | 40 - 140 | 78% | SPK: 50 |
| 84-15-1 | ortho-Terphenyl (SURR) | 0.00 | | 40 - 140 | 0% | SPK: 50 |

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

# Quantitation Report For Aliphatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | PB166923BS | Acq On: | 28 Feb 2025 11:37 |
| Client Sample ID: | PB166923BS | Operator: | YP/AJ |
| Data file: | FC068323.D | Misc: | |
| Instrument: | FID_C | ALS Vial: | 12 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aliphatic C9-C12 | 3.104 | 6.369 | 13831446 | 98.071 | 300 | ug/ml |
| Aliphatic C12-C16 | 6.370 | 9.754 | 11804868 | 86.385 | 200 | ug/ml |
| Aliphatic C16-C21 | 9.755 | 13.107 | 18912877 | 143.681 | 300 | ug/ml |
| Aliphatic C21-C28 | 13.108 | 16.761 | 23798182 | 193.968 | 400 | ug/ml |
| Aliphatic C28-C40 | 16.762 | 21.565 | 32890476 | 319.802 | 600 | ug/ml |
| Aliphatic EPH | 3.104 | 21.565 | 101237849 | 841.906 | | ug/ml |
| ortho-Terphenyl (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |
| 1-chlorooctadecane (SURR) | 12.840 | 12.840 | 4376930 | 38.91 | | ug/ml |
| Aliphatic C9-C28 | 3.104 | 16.761 | 68347373 | 522.105 | 1200 | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022825AL\
Data File : FC068323.D
Signal(s) : FID1A.ch
Acq On : 28 Feb 2025 11:37
Operator : YP/AJ
Sample : PB166923BS
Misc :
ALS Vial : 12 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
PB166923BS

Integration File: autoint1.e
Quant Time: Mar 05 05:23:03 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

| | Compound | R.T. | Response | Conc Units |
|---|---|---|---|---|
| | System Monitoring Compounds | | | |
| 12) S | 1-chlorooctadecane (S... | 12.840 | 4376930 | 38.915 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 77.83% |
| | Target Compounds | | | |
| 1) T | n-Nonane (C9) | 3.205 | 3770437 | 26.802 ug/ml |
| 2) T | n-Decane (C10) | 4.262 | 4690075 | 33.105 ug/ml |
| 4) T | n-Dodecane (C12) | 6.270 | 5370934 | 38.157 ug/ml |
| 6) T | n-Tetradecane (C14) | 8.059 | 5778269 | 42.380 ug/ml |
| 7) T | n-Hexadecane (C16) | 9.655 | 6026599 | 44.001 ug/ml |
| 8) T | n-Octadecane (C18) | 11.094 | 6267228 | 45.827 ug/ml |
| 10) T | n-Eicosane (C20) | 12.400 | 6468032 | 49.645 ug/ml |
| 11) T | n-Heneicosane (C21) | 13.011 | 6177617 | 48.320 ug/ml |
| 13) T | n-Docosane (C22) | 13.595 | 6141972 | 48.735 ug/ml |
| 14) T | n-Tetracosane (C24) | 14.696 | 6008487 | 48.309 ug/ml |
| 15) T | n-Hexacosane (C26) | 15.715 | 5879209 | 48.352 ug/ml |
| 16) T | n-Octacosane (C28) | 16.664 | 5728664 | 48.234 ug/ml |
| 17) T | n-Tricontane (C30) | 17.550 | 5730289 | 47.607 ug/ml |
| 18) T | n-Dotriacontane (C32) | 18.381 | 5695730 | 49.073 ug/ml |
| 19) T | n-Tetratriacontane (C34) | 19.164 | 5652338 | 52.308 ug/ml |
| 20) T | n-Hexatriacontane (C36) | 19.903 | 5406820 | 56.222 ug/ml |
| 21) T | n-Octatriacontane (C38) | 20.615 | 5240074 | 58.289 ug/ml |
| 22) T | n-Tetracontane (C40) | 21.470 | 5034272 | 58.186 ug/ml |

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

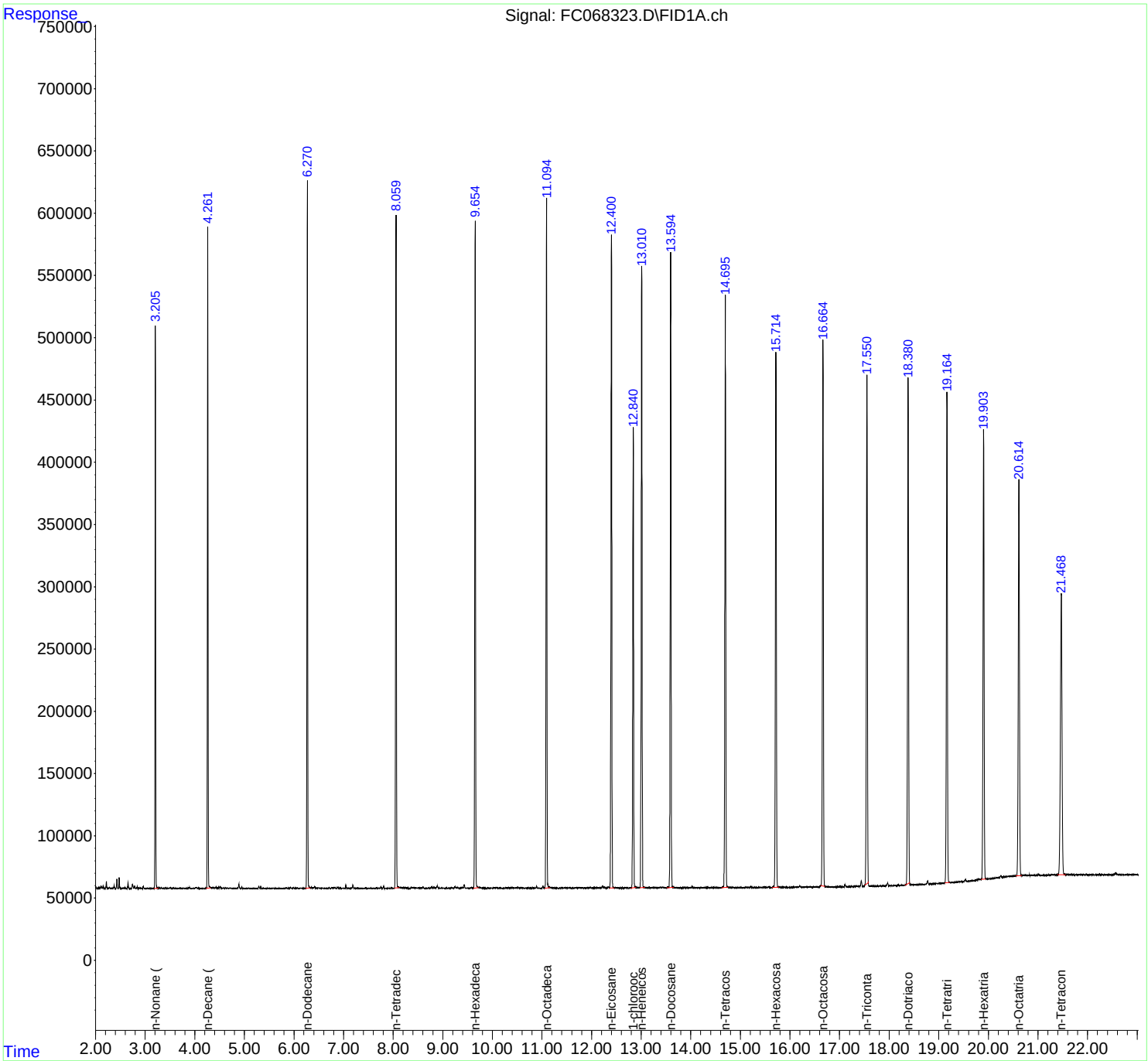
Quantitation Report (QT Reviewed)

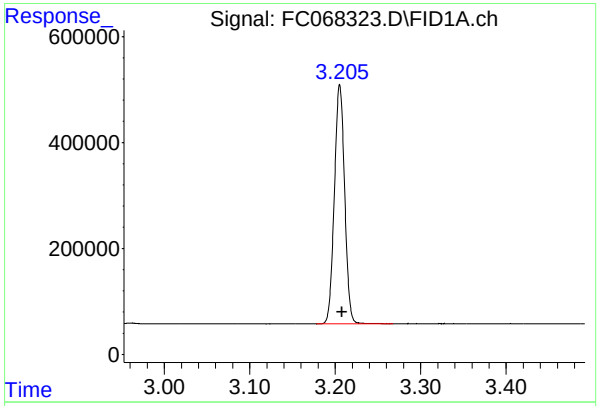
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022825AL\
Data File : FC068323.D
Signal(s) : FID1A.ch
Acq On : 28 Feb 2025 11:37
Operator : YP/AJ
Sample : PB166923BS
Misc :
ALS Vial : 12 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
PB166923BS

Integration File: autoint1.e
Quant Time: Mar 05 05:23:03 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

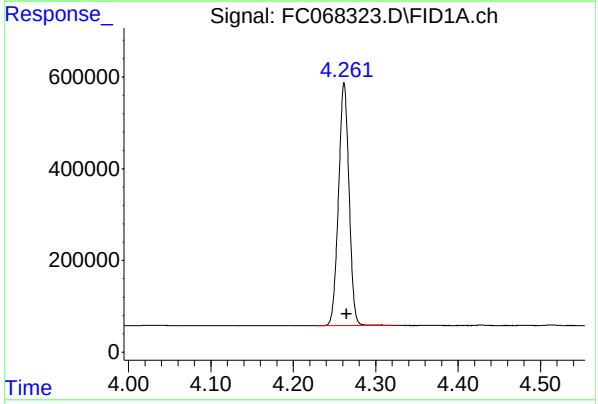





#1 n-Nonane (C9)

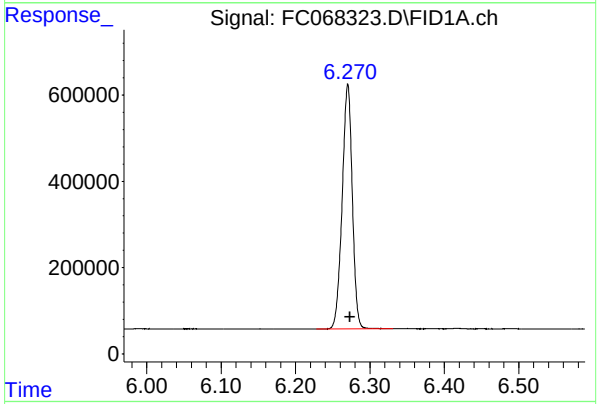
R.T.: 3.205 min
Delta R.T.: -0.003 min
Response: 3770437
Conc: 26.80 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
PB166923BS



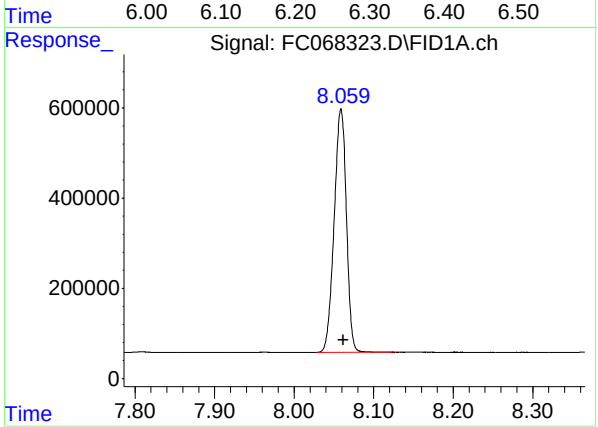

#2 n-Decane (C10)

R.T.: 4.262 min
Delta R.T.: -0.003 min
Response: 4690075
Conc: 33.11 ug/ml



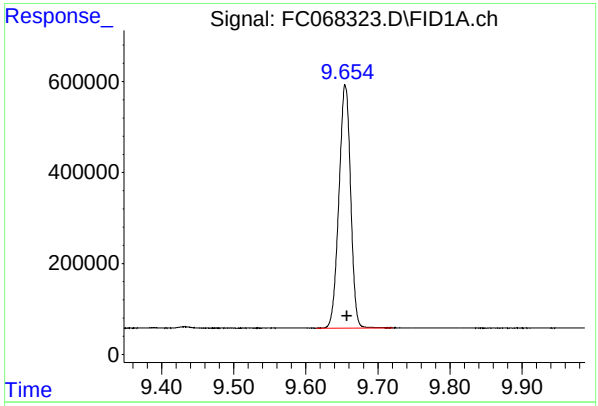

#4 n-Dodecane (C12)

R.T.: 6.270 min
Delta R.T.: -0.003 min
Response: 5370934
Conc: 38.16 ug/ml




#6 n-Tetradecane (C14)

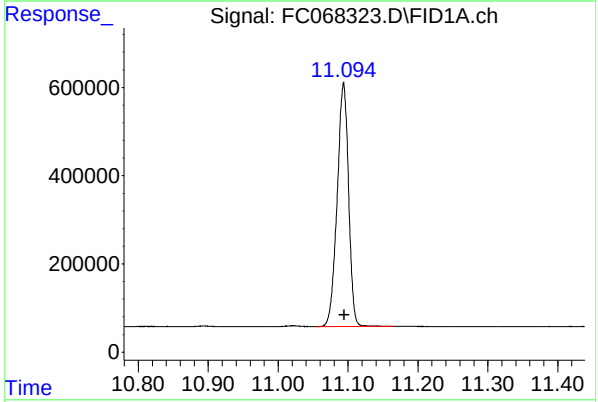
R.T.: 8.059 min
Delta R.T.: -0.003 min
Response: 5778269
Conc: 42.38 ug/ml




#7 n-Hexadecane (C16)

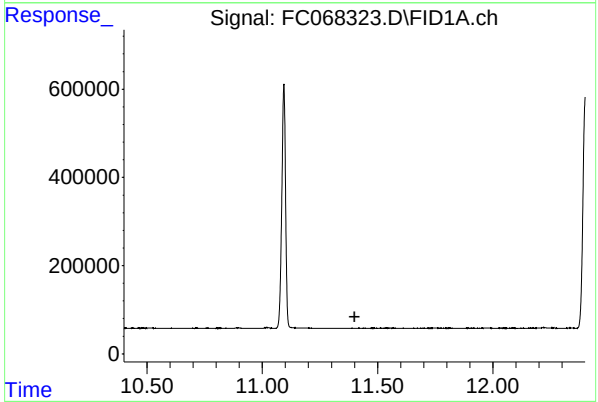
R.T.: 9.655 min
Delta R.T.: -0.003 min
Response: 6026599
Conc: 44.00 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
PB166923BS



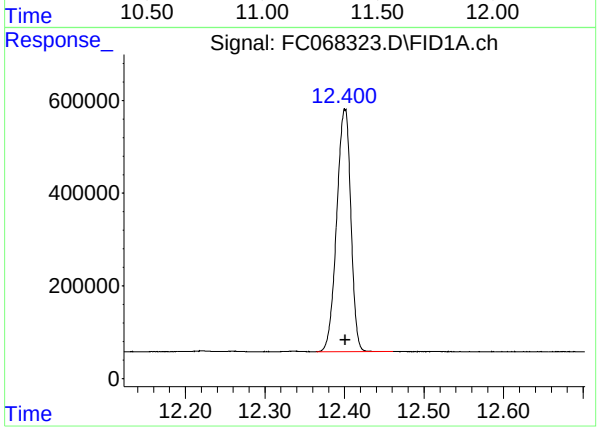

#8 n-Octadecane (C18)

R.T.: 11.094 min
Delta R.T.: -0.001 min
Response: 6267228
Conc: 45.83 ug/ml



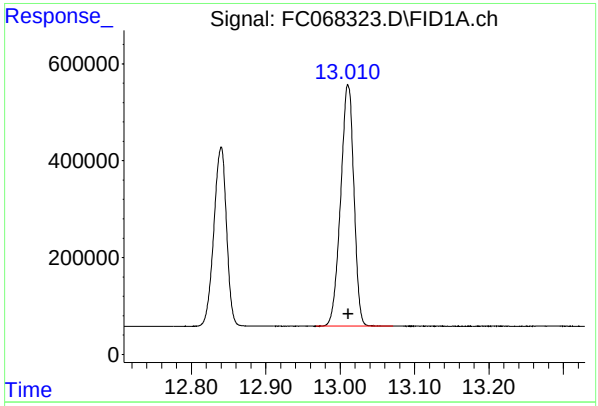

#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.400 min
Response: 0
Conc: N.D.




#10 n-Eicosane (C20)

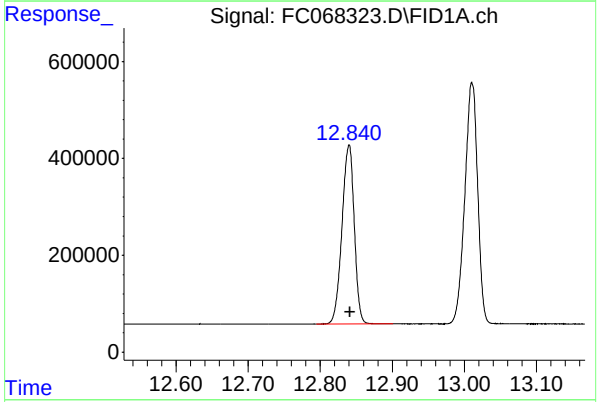
R.T.: 12.400 min
Delta R.T.: 0.000 min
Response: 6468032
Conc: 49.64 ug/ml




#11 n-Heneicosane (C21)

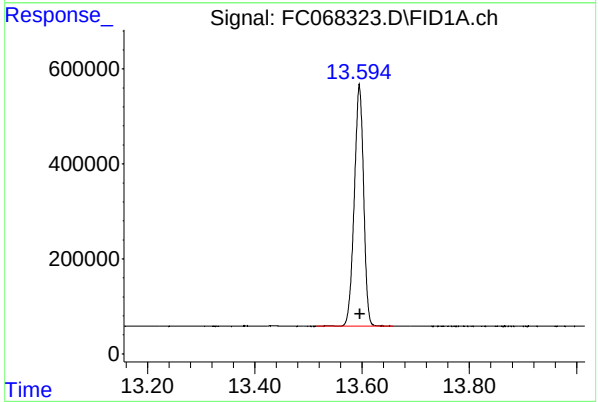
R.T.: 13.011 min
Delta R.T.: 0.000 min
Response: 6177617
Conc: 48.32 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
PB166923BS



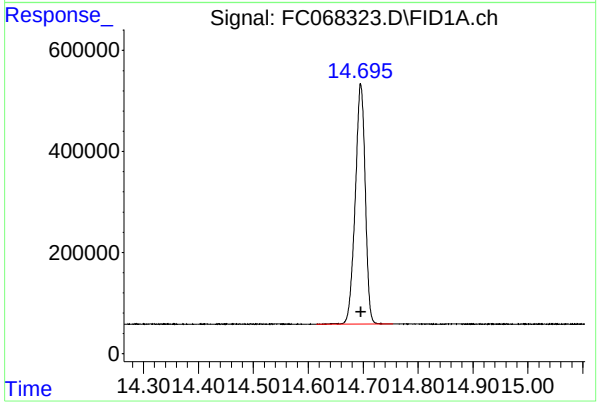

#12 1-chlorooctadecane (SURR)

R.T.: 12.840 min
Delta R.T.: -0.002 min
Response: 4376930
Conc: 38.91 ug/ml



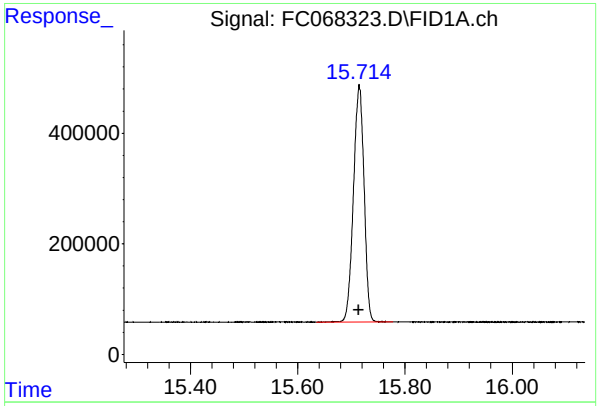

#13 n-Docosane (C22)

R.T.: 13.595 min
Delta R.T.: 0.000 min
Response: 6141972
Conc: 48.73 ug/ml




#14 n-Tetracosane (C24)

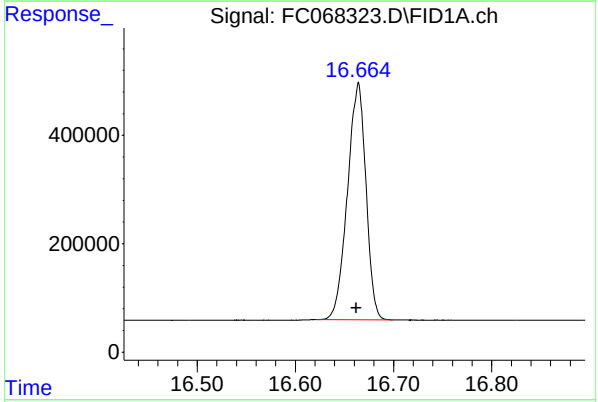
R.T.: 14.696 min
Delta R.T.: 0.000 min
Response: 6008487
Conc: 48.31 ug/ml




#15 n-Hexacosane (C26)

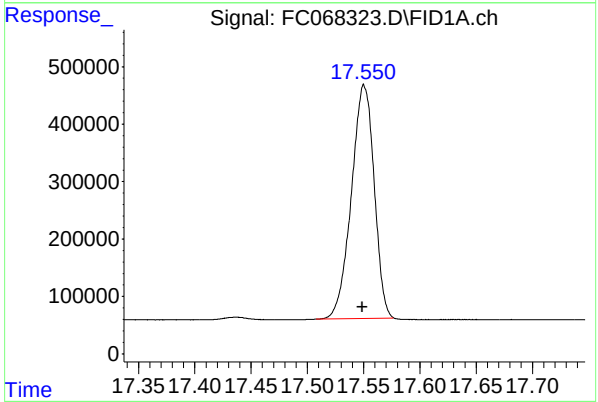
R.T.: 15.715 min
Delta R.T.: 0.000 min
Response: 5879209
Conc: 48.35 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
PB166923BS



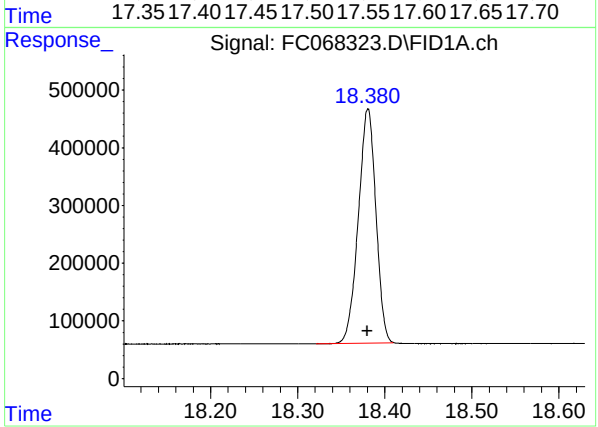

#16 n-Octacosane (C28)

R.T.: 16.664 min
Delta R.T.: 0.002 min
Response: 5728664
Conc: 48.23 ug/ml



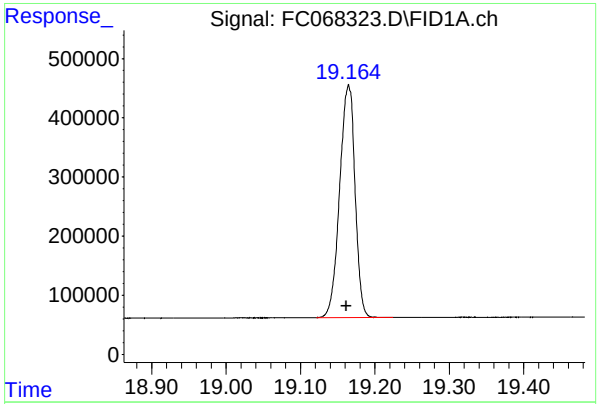

#17 n-Tricontane (C30)

R.T.: 17.550 min
Delta R.T.: 0.001 min
Response: 5730289
Conc: 47.61 ug/ml




#18 n-Dotriacontane (C32)

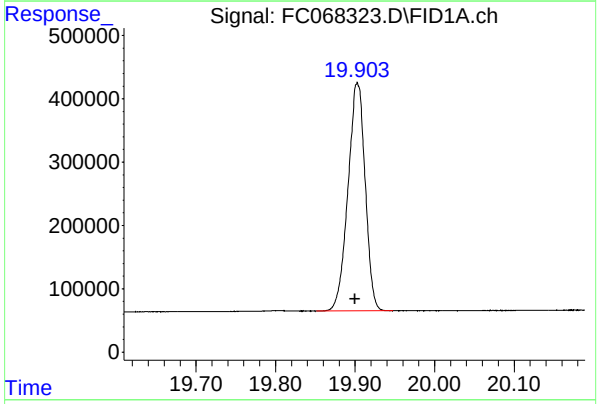
R.T.: 18.381 min
Delta R.T.: 0.000 min
Response: 5695730
Conc: 49.07 ug/ml




#19 n-Tetratriacontane (C34)

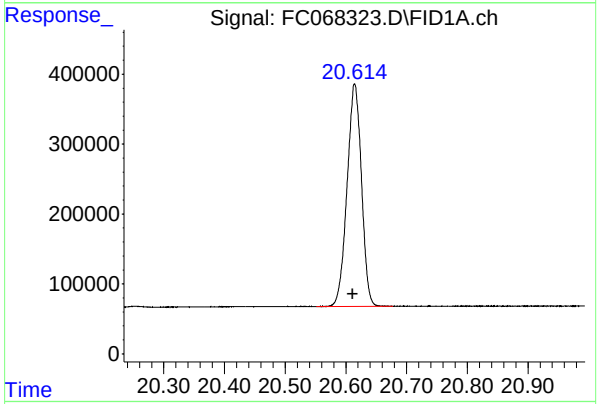
R.T.: 19.164 min
Delta R.T.: 0.003 min
Response: 5652338
Conc: 52.31 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
PB166923BS



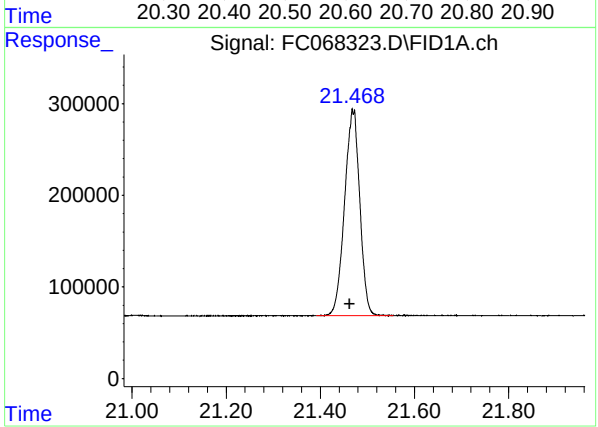

#20 n-Hexatriacontane (C36)

R.T.: 19.903 min
Delta R.T.: 0.003 min
Response: 5406820
Conc: 56.22 ug/ml




#21 n-Octatriacontane (C38)

R.T.: 20.615 min
Delta R.T.: 0.004 min
Response: 5240074
Conc: 58.29 ug/ml




#22 n-Tetracontane (C40)

R.T.: 21.470 min
Delta R.T.: 0.007 min
Response: 5034272
Conc: 58.19 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022825AL\
Data File : FC068323.D
Signal(s) : FID1A.ch
Acq On : 28 Feb 2025 11:37
Sample : PB166923BS
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Title : GC Extractables

Signal : FID1A.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 3.205 | 3.178 | 3.268 | BB | 449086 | 3770437 | 58.29% | 3.570% |
| 2 | 4.262 | 4.228 | 4.321 | BB | 526418 | 4690075 | 72.51% | 4.441% |
| 3 | 6.270 | 6.228 | 6.331 | BB | 569210 | 5370934 | 83.04% | 5.085% |
| 4 | 8.059 | 8.028 | 8.124 | BB | 538627 | 5778269 | 89.34% | 5.471% |
| 5 | 9.655 | 9.614 | 9.721 | BB | 535914 | 6026599 | 93.18% | 5.706% |
| 6 | 11.094 | 11.054 | 11.164 | BB | 550618 | 6267228 | 96.90% | 5.934% |
| 7 | 12.400 | 12.364 | 12.461 | BB | 527788 | 6468032 | 100.00% | 6.124% |
| 8 | 12.840 | 12.794 | 12.901 | BB | 374039 | 4376930 | 67.67% | 4.144% |
| 9 | 13.011 | 12.968 | 13.071 | BB | 499069 | 6177617 | 95.51% | 5.849% |
| 10 | 13.595 | 13.514 | 13.658 | BB | 506611 | 6141972 | 94.96% | 5.815% |
| 11 | 14.696 | 14.614 | 14.754 | BB | 474250 | 6008487 | 92.90% | 5.689% |
| 12 | 15.715 | 15.634 | 15.778 | BB | 426830 | 5879209 | 90.90% | 5.567% |
| 13 | 16.664 | 16.598 | 16.728 | BB | 438374 | 5768514 | 89.18% | 5.462% |
| 14 | 17.550 | 17.488 | 17.608 | BB | 407922 | 5811305 | 89.85% | 5.502% |
| 15 | 18.381 | 18.304 | 18.448 | BB | 407994 | 5745667 | 88.83% | 5.440% |
| 16 | 19.164 | 19.121 | 19.224 | BB | 392230 | 5652338 | 87.39% | 5.352% |
| 17 | 19.903 | 19.851 | 19.948 | BB | 359474 | 5406820 | 83.59% | 5.119% |
| 18 | 20.615 | 20.551 | 20.678 | BB | 318753 | 5240074 | 81.01% | 4.961% |
| 19 | 21.470 | 21.391 | 21.554 | BB | 221575 | 5034272 | 77.83% | 4.767% |

Sum of corrected areas: 105614773

Aliphatic EPH 021125.M Sat Mar 01 01:23:14 2025

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Weston Solutions, Inc. | Date Collected: | |
| Project: | RFP 905 | Date Received: | |
| Client Sample ID: | PB166923BS | SDG No.: | Q1421 |
| Lab Sample ID: | PB166923BS | Matrix: | Solid |
| Analytical Method: | NJEPH | % Solid: | 100 |
| Sample Wt/Vol: | 30.03 Units: g | Final Vol: | 2000 uL |
| Soil Aliquot Vol: | uL | Test: | EPH |
| Prep Method : | | | |

| File ID : | Dilution: | Prep Date : | Date Analyzed : | Prep Batch ID |
|---|---|---|---|---|
| FD049131.D | 1 | 02/27/25 | 02/28/25 | PB166923 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| Aromatic C10-C12 | Aromatic C10-C12 | 6.49 | | 0.30 | 0.67 | mg/kg |
| Aromatic C12-C16 | Aromatic C12-C16 | 11.1 | | 0.34 | 1.00 | mg/kg |
| Aromatic C16-C21 | Aromatic C16-C21 | 21.5 | | 0.96 | 1.67 | mg/kg |
| Aromatic C21-C36 | Aromatic C21-C36 | 34.3 | | 2.00 | 2.66 | mg/kg |
| **SURROGATES** | | | | | | |
| 580-13-2 | 2-Bromonaphthalene (SURR) | 58.3 | | 40 - 140 | 117% | SPK: 50 |
| 321-60-8 | 2-Flurobiphenyl (SURR) | 61.9 | | 40 - 140 | 124% | SPK: 50 |
| 84-15-1 | ortho-Terphenyl (SURR) | 53.0 | | 40 - 140 | 106% | SPK: 50 |

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

# Quantitation Report For Aromatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | PB166923BS | Acq On: | 28 Feb 2025 11:37 |
| Client Sample ID: | PB166923BS | Operator: | YP/AJ |
| Data file: | FD049131.D | Misc: | |
| Instrument: | FID_D | ALS Vial: | 62 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aromatic C10-C12 | 4.076 | 5.794 | 15506186 | 97.511 | 200 | ug/ml |
| Aromatic C12-C16 | 5.795 | 8.396 | 26811280 | 166.596 | 300 | ug/ml |
| Aromatic C16-C21 | 8.397 | 12.661 | 49558614 | 323.154 | 500 | ug/ml |
| Aromatic C21-C36 | 12.662 | 18.073 | 73636189 | 514.525 | 800 | ug/ml |
| Aromatic EPH | 4.076 | 18.073 | 165512269 | 1100 | | ug/ml |
| 2-Bromonaphthalene (SURR) | 7.352 | 7.352 | 8337130 | 58.26 | | ug/ml |
| 2-Flurobiphenyl (SURR) | 8.203 | 8.203 | 5441864 | 61.9 | | ug/ml |
| ortho-Terphenyl (SURR) | 11.237 | 11.237 | 8579131 | 53.03 | | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022825AR\
Data File : FD049131.D
Signal(s) : FID2B.ch
Acq On : 28 Feb 2025 11:37
Operator : YP/AJ
Sample : PB166923BS
Misc :
ALS Vial : 62 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
PB166923BS

Integration File: autoint1.e
Quant Time: Mar 01 02:17:06 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

| | Compound | R.T. | Response | Conc Units |
|---|---|---|---|---|
| | **System Monitoring Compounds** | | | |
| 4) S | 2-Bromonaphthalene (S... | 7.352 | 8337130 | 58.257 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 116.51% |
| 6) S | 2-Flurobiphenyl (SURR) | 8.203 | 5441864 | 61.901 ug/ml |
| Spiked Amount | 50.000 Range | 0 - 131 | Recovery = | 123.80% |
| 11) S | ortho-Terphenyl (SURR) | 11.237 | 8579131 | 53.031 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 106.06% |
| | **Target Compounds** | | | |
| 1) T | 1,2,3-Trimethylbenzen... | 4.176 | 7284149 | 45.739 ug/ml |
| 2) T | Naphthalene (C11.7) | 5.693 | 8222037 | 51.780 ug/ml |
| 3) T | 2-Methylnaphthalene (... | 6.739 | 8074488 | 51.862 ug/ml |
| 5) T | Acenaphthylene (C15.06) | 8.005 | 9136899 | 56.191 ug/ml |
| 7) T | Acenaphthene (C15.5) | 8.300 | 9599893 | 58.355 ug/ml |
| 8) T | Flouorene (C16.55) | 9.079 | 9673508 | 61.361 ug/ml |
| 9) T | Phenanthrene (C19.36) | 10.467 | 9815403 | 65.132 ug/ml |
| 10) T | Anthracene (C19.43) | 10.543 | 9838705 | 65.145 ug/ml |
| 12) T | Fluoranthene (C21.85) | 12.273 | 10212040 | 66.177 ug/ml |
| 13) T | Pyrene (C20.8) | 12.566 | 10018958 | 65.034 ug/ml |
| 14) T | Benzo[a]anthracene (C... | 14.437 | 9485151 | 72.191 ug/ml |
| 15) T | Chrysene (C27.41) | 14.479 | 9302019 | 57.531 ug/ml |
| 16) T | benzo[b]fluoranthene ... | 15.987 | 9472667 | 68.845 ug/ml |
| 17) T | Bnezo[k]fluoranthene ... | 16.022 | 9519915 | 60.275 ug/ml |
| 18) T | Benzo[a]pyrene (C31.34) | 16.362 | 9102339 | 67.059 ug/ml |
| 19) T | Indeno[1,2,3-cd]pyren... | 17.733 | 8774948 | 80.300 ug/ml |
| 20) T | Dibenz[a,h]anthracene... | 17.767 | 8997450 | 57.996 ug/ml |
| 21) T | Benzo[g,h,i]perylene ... | 17.983 | 8981700 | 61.964 ug/ml |

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

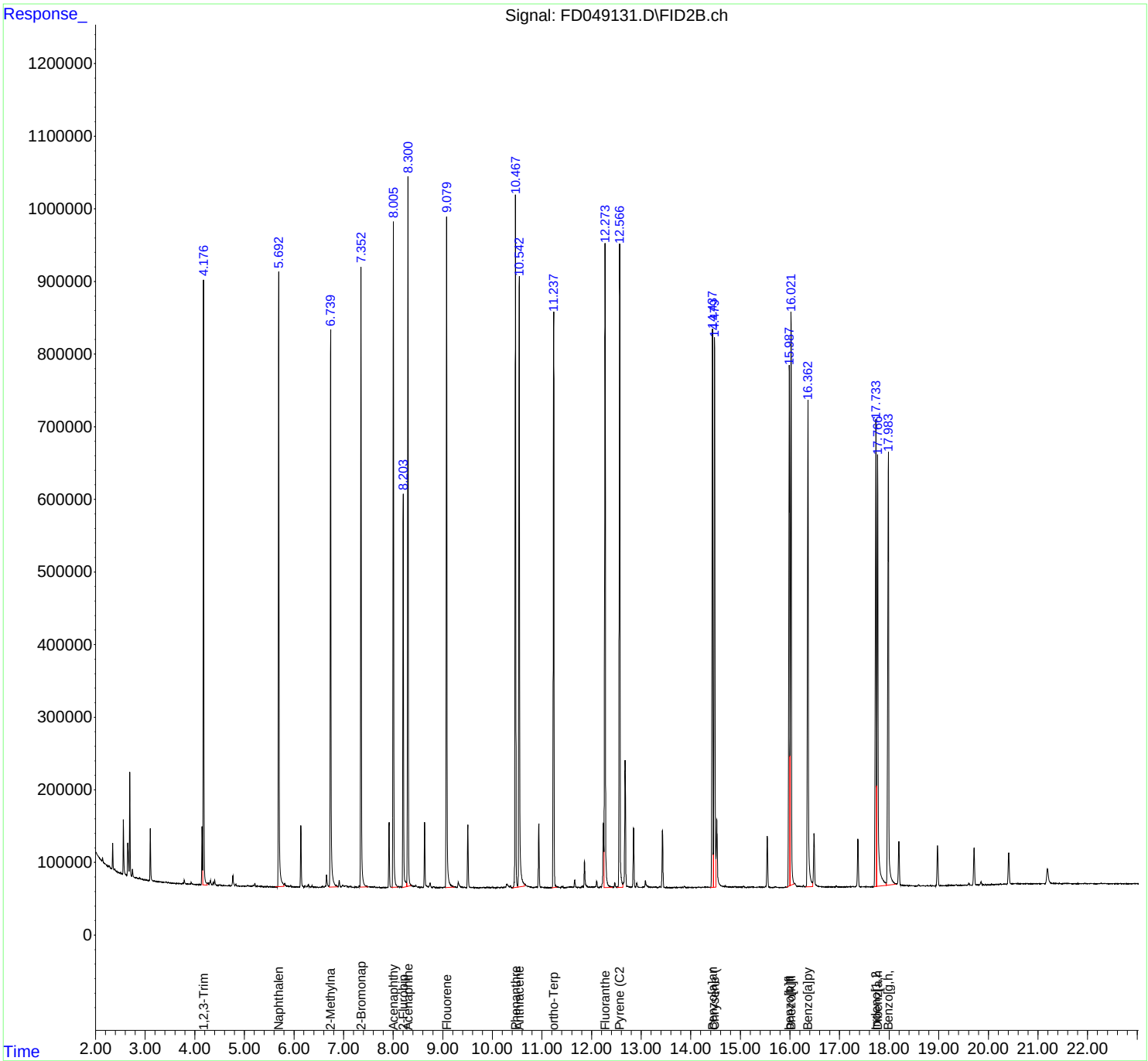
Quantitation Report (QT Reviewed)

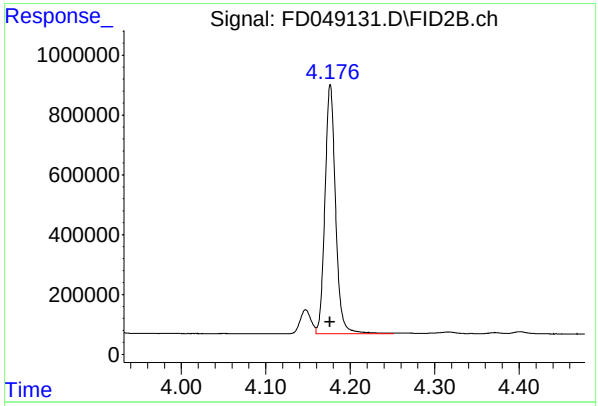
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022825AR\
Data File : FD049131.D
Signal(s) : FID2B.ch
Acq On : 28 Feb 2025 11:37
Operator : YP/AJ
Sample : PB166923BS
Misc :
ALS Vial : 62 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
PB166923BS

Integration File: autoint1.e
Quant Time: Mar 01 02:17:06 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

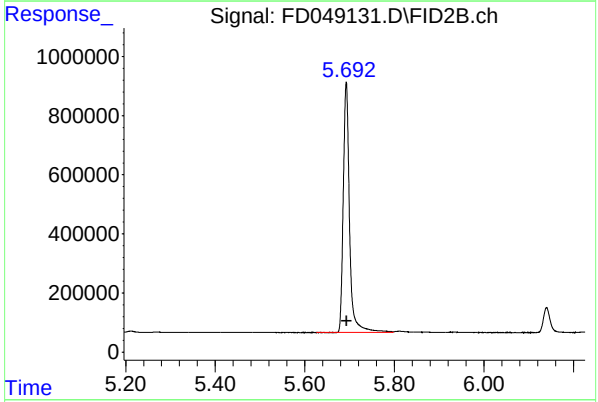





#1 1,2,3-Trimethylbenzene (C10.1)

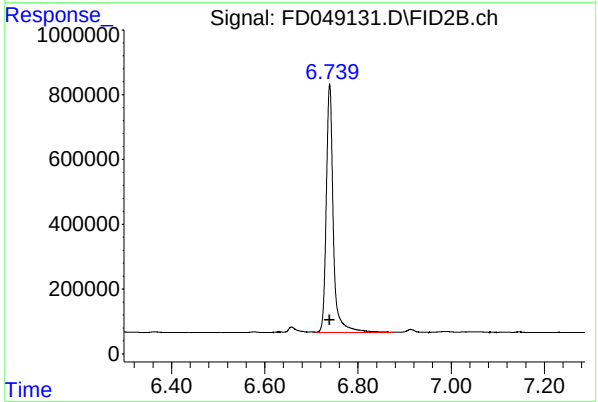
R.T.: 4.176 min
Delta R.T.: 0.000 min
Response: 7284149
Conc: 45.74 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
PB166923BS



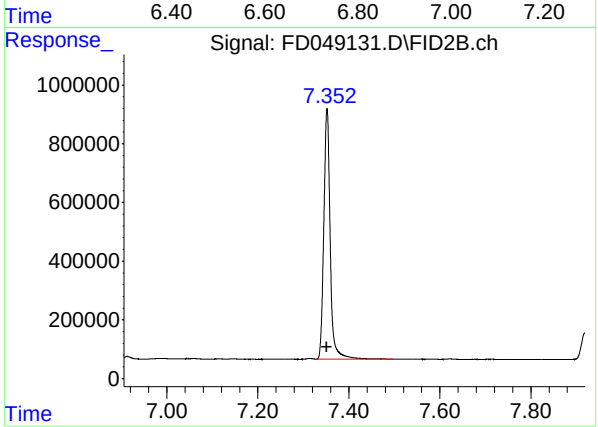

#2 Naphthalene (C11.7)

R.T.: 5.693 min
Delta R.T.: 0.000 min
Response: 8222037
Conc: 51.78 ug/ml



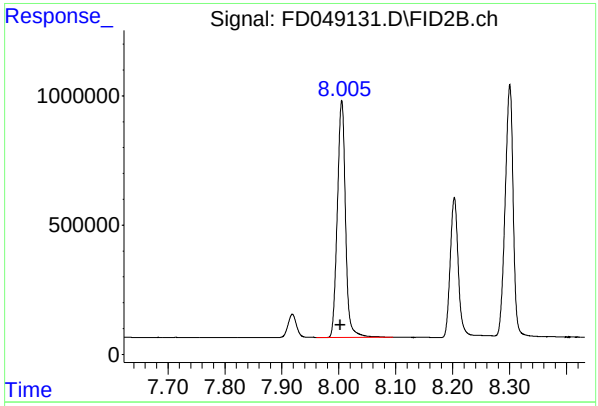

#3 2-Methylnaphthalene (C12.89)

R.T.: 6.739 min
Delta R.T.: 0.000 min
Response: 8074488
Conc: 51.86 ug/ml




#4 2-Bromonaphthalene (SURR)

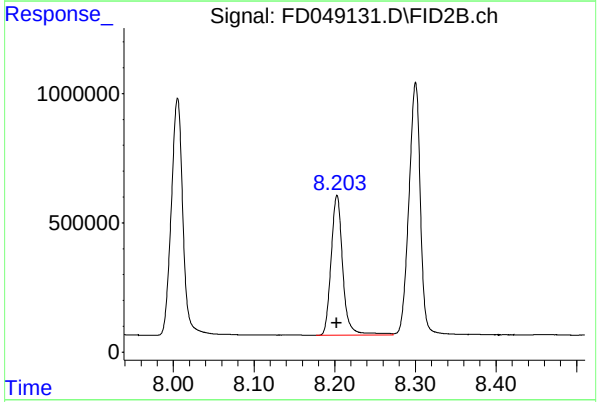
R.T.: 7.352 min
Delta R.T.: 0.000 min
Response: 8337130
Conc: 58.26 ug/ml




#5 Acenaphthylene (C15.06)

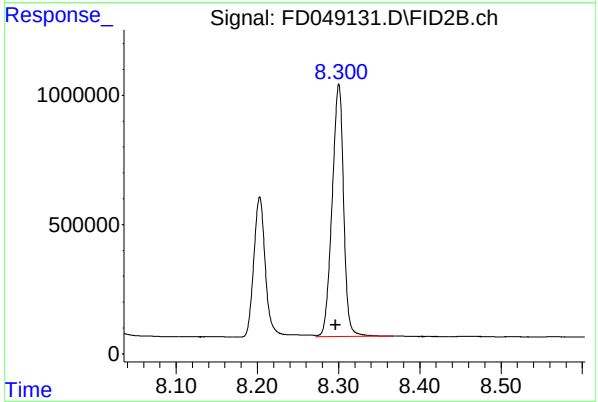
R.T.: 8.005 min
Delta R.T.: 0.002 min
Response: 9136899
Conc: 56.19 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
PB166923BS



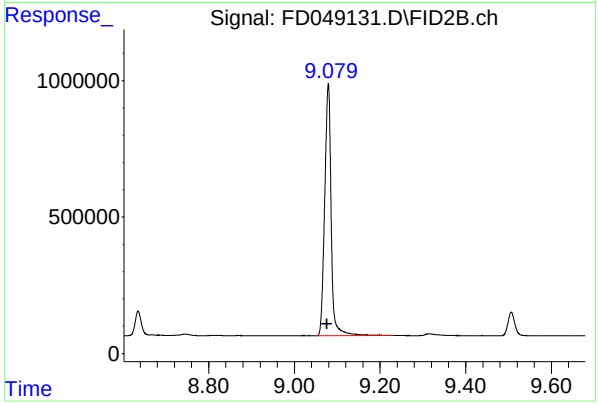

#6 2-Flurobiphenyl (SURR)

R.T.: 8.203 min
Delta R.T.: 0.000 min
Response: 5441864
Conc: 61.90 ug/ml



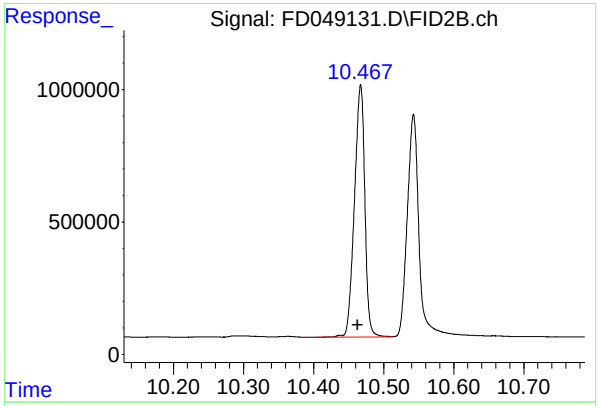

#7 Acenaphthene (C15.5)

R.T.: 8.300 min
Delta R.T.: 0.004 min
Response: 9599893
Conc: 58.35 ug/ml




#8 Flouorene (C16.55)

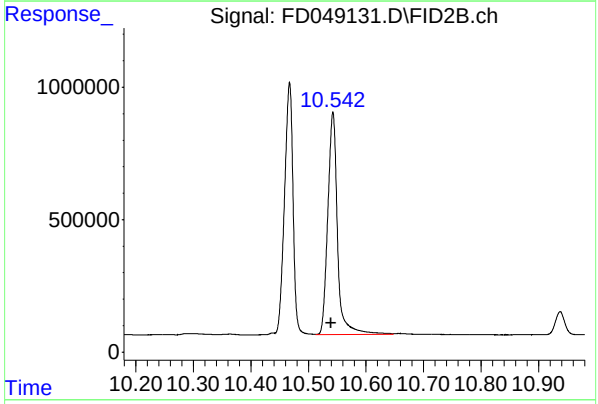
R.T.: 9.079 min
Delta R.T.: 0.003 min
Response: 9673508
Conc: 61.36 ug/ml




#9 Phenanthrene (C19.36)

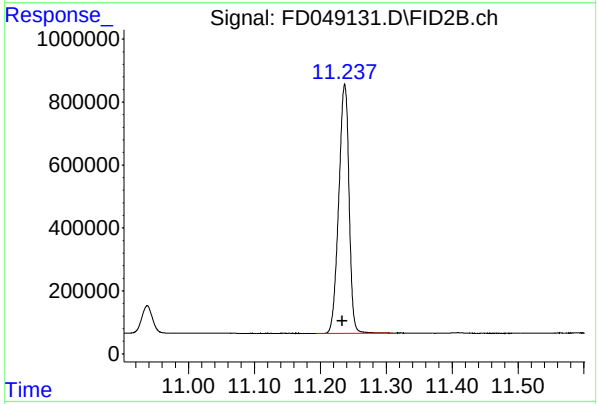
R.T.: 10.467 min
Delta R.T.: 0.004 min
Response: 9815403
Conc: 65.13 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
PB166923BS



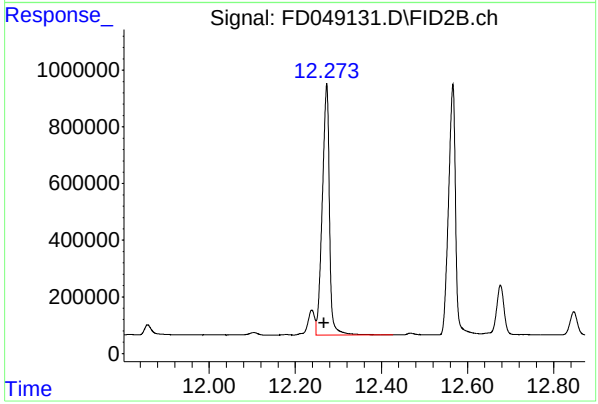

#10 Anthracene (C19.43)

R.T.: 10.543 min
Delta R.T.: 0.003 min
Response: 9838705
Conc: 65.14 ug/ml



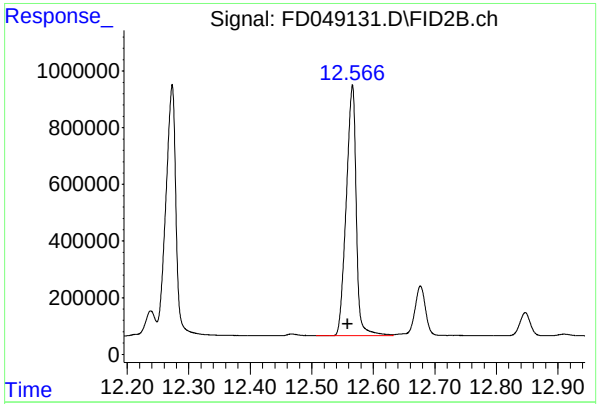

#11 ortho-Terphenyl (SURR)

R.T.: 11.237 min
Delta R.T.: 0.004 min
Response: 8579131
Conc: 53.03 ug/ml




#12 Fluoranthene (C21.85)

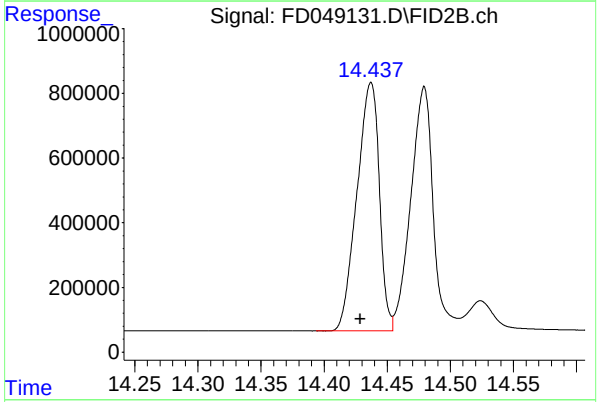
R.T.: 12.273 min
Delta R.T.: 0.006 min
Response: 10212040
Conc: 66.18 ug/ml




#13 Pyrene (C20.8)

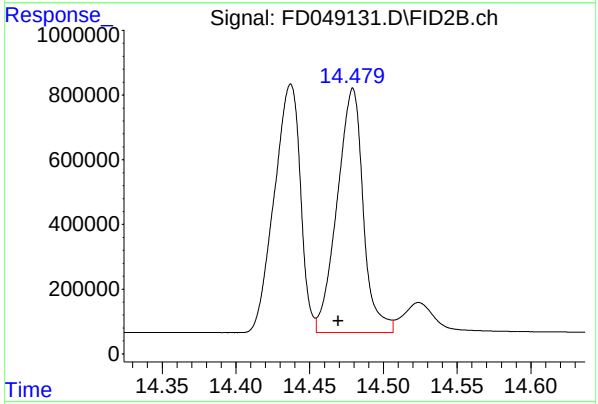
R.T.: 12.566 min
Delta R.T.: 0.008 min
Response: 10018958
Conc: 65.03 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
PB166923BS



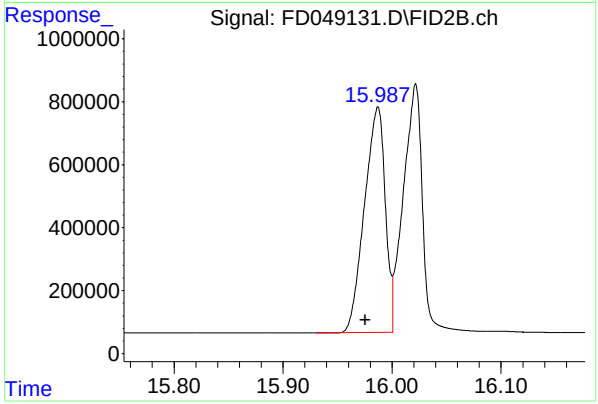

#14 Benzo[a]anthracene (C26.37)

R.T.: 14.437 min
Delta R.T.: 0.009 min
Response: 9485151
Conc: 72.19 ug/ml



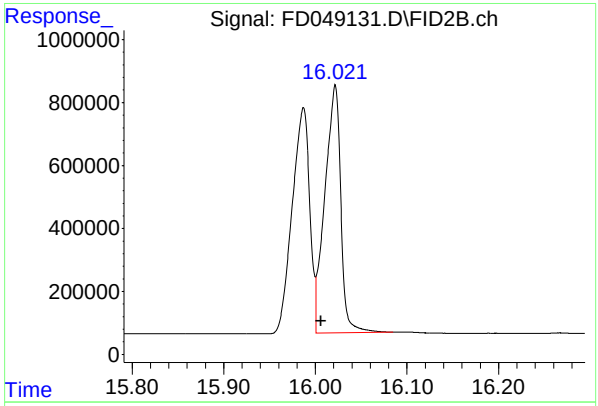

#15 Chrysene (C27.41)

R.T.: 14.479 min
Delta R.T.: 0.010 min
Response: 9302019
Conc: 57.53 ug/ml




#16 benzo[b]fluoranthene (C30.41)

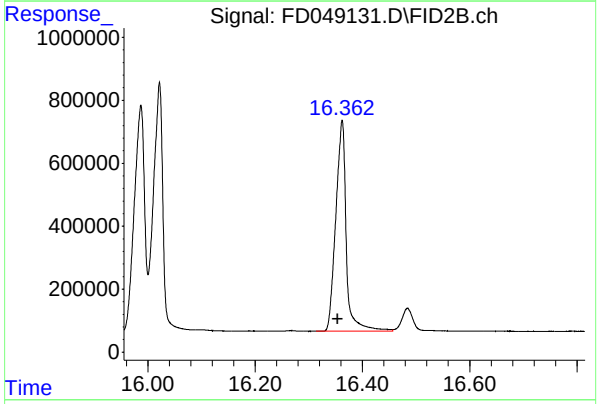
R.T.: 15.987 min
Delta R.T.: 0.011 min
Response: 9472667
Conc: 68.84 ug/ml




#17 Bnezo[k]fluoranthene (C30.14)

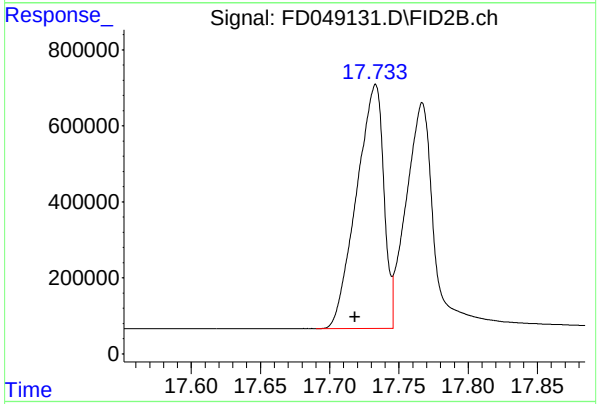
R.T.: 16.022 min
Delta R.T.: 0.015 min
Response: 9519915
Conc: 60.27 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
PB166923BS



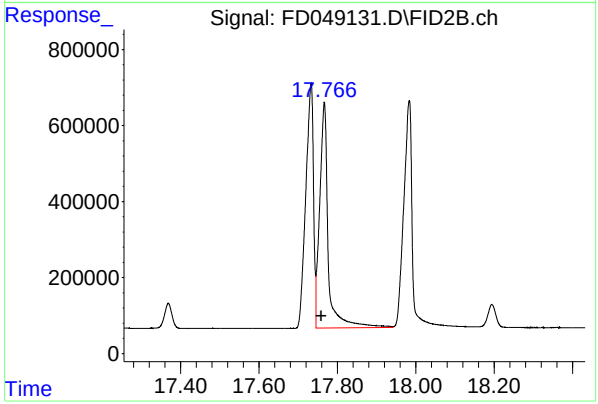

#18 Benzo[a]pyrene (C31.34)

R.T.: 16.362 min
Delta R.T.: 0.009 min
Response: 9102339
Conc: 67.06 ug/ml



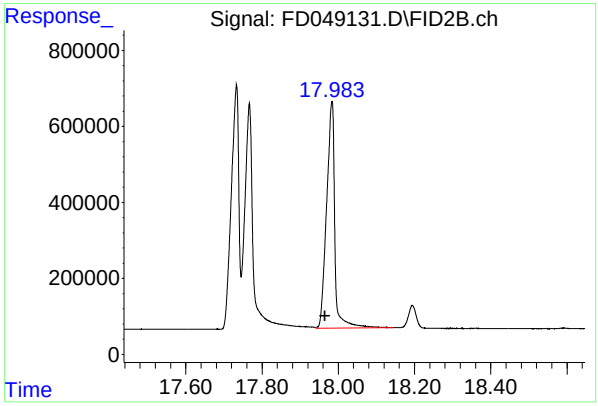

#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.733 min
Delta R.T.: 0.015 min
Response: 8774948
Conc: 80.30 ug/ml




#20 Dibenz[a,h]anthracene (C30.36)

R.T.: 17.767 min
Delta R.T.: 0.008 min
Response: 8997450
Conc: 58.00 ug/ml




#21 Benzo[g,h,i]perylene (C34.01)

R.T.: 17.983 min
Delta R.T.: 0.018 mi
Response: 8981700
Conc: 61.96 ug/m

**Instrument :**
FID_D
**ClientSampleId :**
PB166923BS

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022825AR\
Data File : FD049131.D
Signal(s) : FID2B.ch
Acq On : 28 Feb 2025 11:37
Sample : PB166923BS
Misc :
ALS Vial : 62 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Title : GC Extractables

Signal : FID2B.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 4.176 | 4.160 | 4.251 | VV | 832466 | 7284149 | 71.33% | 3.877% |
| 2 | 5.693 | 5.625 | 5.797 | BV | 847783 | 8222037 | 80.51% | 4.376% |
| 3 | 6.739 | 6.710 | 6.875 | VV | 766284 | 8074488 | 79.07% | 4.298% |
| 4 | 7.352 | 7.328 | 7.497 | VB | 853398 | 8337130 | 81.64% | 4.438% |
| 5 | 8.005 | 7.960 | 8.095 | BV | 916751 | 9136899 | 89.47% | 4.863% |
| 6 | 8.203 | 8.177 | 8.272 | BV | 542452 | 5441864 | 53.29% | 2.897% |
| 7 | 8.300 | 8.272 | 8.367 | VV | 975321 | 9599893 | 94.01% | 5.110% |
| 8 | 9.079 | 9.051 | 9.230 | PV | 926912 | 9673508 | 94.73% | 5.149% |
| 9 | 10.467 | 10.403 | 10.513 | BV | 952424 | 9815403 | 96.12% | 5.225% |
| 10 | 10.543 | 10.513 | 10.647 | VV | 840898 | 9838705 | 96.34% | 5.237% |
| 11 | 11.237 | 11.193 | 11.310 | BV | 791167 | 8579131 | 84.01% | 4.567% |
| 12 | 12.273 | 12.248 | 12.427 | VB | 888617 | 10212040 | 100.00% | 5.436% |
| 13 | 12.566 | 12.507 | 12.632 | VV | 889348 | 10018958 | 98.11% | 5.333% |
| 14 | 14.437 | 14.393 | 14.454 | BV | 768080 | 9485151 | 92.88% | 5.049% |
| 15 | 14.479 | 14.454 | 14.507 | VV | 756410 | 9302019 | 91.09% | 4.951% |
| 16 | 15.987 | 15.930 | 16.001 | BV | 716637 | 9472667 | 92.76% | 5.042% |
| 17 | 16.022 | 16.001 | 16.085 | VV | 788969 | 9519915 | 93.22% | 5.067% |
| 18 | 16.362 | 16.313 | 16.457 | BV | 670089 | 9102339 | 89.13% | 4.845% |
| 19 | 17.733 | 17.690 | 17.746 | BV | 643928 | 8774948 | 85.93% | 4.671% |
| 20 | 17.767 | 17.746 | 17.942 | VV | 594625 | 8997450 | 88.11% | 4.789% |
| 21 | 17.983 | 17.942 | 18.143 | VV | 596917 | 8981700 | 87.95% | 4.781% |

Sum of corrected areas: 187870394

Aromatic EPH 021125.M Sat Mar 01 03:53:48 2025

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Weston Solutions, Inc. | Date Collected: | |
| Project: | RFP 905 | Date Received: | |
| Client Sample ID: | PB166923BSD | SDG No.: | Q1421 |
| Lab Sample ID: | PB166923BSD | Matrix: | Solid |
| Analytical Method: | NJEPH | % Solid: | 100 |
| Sample Wt/Vol: | 30.02 Units: g | Final Vol: | 2000 uL |
| Soil Aliquot Vol: | uL | Test: | EPH |
| Prep Method : | | | |

| Prep Date : | Date Analyzed : | Prep Batch ID |
|---|---|---|
| 02/27/25 13:10 | 02/28/25 12:13 | PB166923 |

| CAS Number | Parameter | Conc. | Qualifier | Dilution | MDL | LOQ / CRQL | Units(Dry Weight) | Datafile |
|---|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | | |
| Aliphatic C9-C12 | Aliphatic C9-C12 | 6.56 | | 1 | 0.38 | 1.00 | mg/kg | FC068324.D |
| Aliphatic C12-C16 | Aliphatic C12-C16 | 5.75 | | 1 | 0.24 | 0.67 | mg/kg | FC068324.D |
| Aliphatic C16-C21 | Aliphatic C16-C21 | 9.54 | | 1 | 0.30 | 1.00 | mg/kg | FC068324.D |
| Aliphatic C21-C28 | Aliphatic C21-C28 | 12.9 | | 1 | 0.80 | 1.33 | mg/kg | FC068324.D |
| Aliphatic C28-C40 | Aliphatic C28-C40 | 21.4 | | 1 | 1.80 | 2.00 | mg/kg | FC068324.D |
| Aromatic C10-C12 | Aromatic C10-C12 | 6.56 | | 1 | 0.30 | 0.67 | mg/kg | FD049132.D |
| Aromatic C12-C16 | Aromatic C12-C16 | 11.3 | | 1 | 0.34 | 1.00 | mg/kg | FD049132.D |
| Aromatic C16-C21 | Aromatic C16-C21 | 21.8 | | 1 | 0.96 | 1.67 | mg/kg | FD049132.D |
| Aromatic C21-C36 | Aromatic C21-C36 | 34.9 | | 1 | 2.00 | 2.66 | mg/kg | FD049132.D |
| Total AliphaticEPH | Total AliphaticEPH | 56.1 | | | 3.52 | 5.99 | mg/kg | |
| Total AromaticEPH | Total AromaticEPH | 74.6 | | | 3.60 | 6.00 | mg/kg | |
| Total EPH | Total EPH | 131 | | | 7.12 | 12.0 | mg/kg | |

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control 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

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Weston Solutions, Inc. | Date Collected: | |
| Project: | RFP 905 | Date Received: | |
| Client Sample ID: | PB166923BSD | SDG No.: | Q1421 |
| Lab Sample ID: | PB166923BSD | Matrix: | Solid |
| Analytical Method: | NJEPH | % Solid: | 100 |
| Sample Wt/Vol: | 30.02 Units: g | Final Vol: | 2000 uL |
| Soil Aliquot Vol: | uL | Test: | EPH |
| Prep Method : | | | |

| File ID : | Dilution: | Prep Date : | Date Analyzed : | Prep Batch ID |
|---|---|---|---|---|
| FC068324.D | 1 | 02/27/25 | 02/28/25 | PB166923 |

| CAS Number | Parameter | | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | |
| Aliphatic C9-C12 | Aliphatic C9-C12 | | 6.56 | | 0.38 | 1.00 | mg/kg |
| Aliphatic C12-C16 | Aliphatic C12-C16 | | 5.75 | | 0.24 | 0.67 | mg/kg |
| Aliphatic C16-C21 | Aliphatic C16-C21 | | 9.54 | | 0.30 | 1.00 | mg/kg |
| Aliphatic C21-C28 | Aliphatic C21-C28 | | 12.9 | | 0.80 | 1.33 | mg/kg |
| Aliphatic C28-C40 | Aliphatic C28-C40 | | 21.4 | | 1.80 | 2.00 | mg/kg |
| **SURROGATES** | | | | | | | |
| 3383-33-2 | 1-chlorooctadecane (SURR) | | 38.7 | | 40 - 140 | 77% | SPK: 50 |
| 84-15-1 | ortho-Terphenyl (SURR) | | 0.00 | | 40 - 140 | 0% | SPK: 50 |

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

# Quantitation Report For Aliphatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | PB166923BSD | Acq On: | 28 Feb 2025 12:13 |
| Client Sample ID: | PB166923BSD | Operator: | YP/AJ |
| Data file: | FC068324.D | Misc: | |
| Instrument: | FID_C | ALS Vial: | 13 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aliphatic C9-C12 | 3.104 | 6.369 | 13889956 | 98.486 | 300 | ug/ml |
| Aliphatic C12-C16 | 6.370 | 9.754 | 11796061 | 86.32 | 200 | ug/ml |
| Aliphatic C16-C21 | 9.755 | 13.107 | 18839655 | 143.125 | 300 | ug/ml |
| Aliphatic C21-C28 | 13.108 | 16.761 | 23724700 | 193.369 | 400 | ug/ml |
| Aliphatic C28-C40 | 16.762 | 21.565 | 33036052 | 321.217 | 600 | ug/ml |
| Aliphatic EPH | 3.104 | 21.565 | 101286424 | 842.517 | | ug/ml |
| ortho-Terphenyl (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |
| 1-chlorooctadecane (SURR) | 12.840 | 12.840 | 4356774 | 38.74 | | ug/ml |
| Aliphatic C9-C28 | 3.104 | 16.761 | 68250372 | 521.3 | 1200 | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022825AL\
Data File : FC068324.D
Signal(s) : FID1A.ch
Acq On : 28 Feb 2025 12:13
Operator : YP/AJ
Sample : PB166923BSD
Misc :
ALS Vial : 13 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
PB166923BSD

Integration File: autoint1.e
Quant Time: Mar 05 05:23:15 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

| | Compound | R.T. | Response | Conc Units |
|---|---|---|---|---|
| | System Monitoring Compounds | | | |
| 12) S | 1-chlorooctadecane (S... | 12.840 | 4356774 | 38.736 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 77.47% |
| | Target Compounds | | | |
| 1) T | n-Nonane (C9) | 3.205 | 3794951 | 26.976 ug/ml |
| 2) T | n-Decane (C10) | 4.262 | 4712176 | 33.261 ug/ml |
| 4) T | n-Dodecane (C12) | 6.270 | 5382829 | 38.242 ug/ml |
| 6) T | n-Tetradecane (C14) | 8.059 | 5779518 | 42.389 ug/ml |
| 7) T | n-Hexadecane (C16) | 9.655 | 6016543 | 43.927 ug/ml |
| 8) T | n-Octadecane (C18) | 11.093 | 6243297 | 45.652 ug/ml |
| 10) T | n-Eicosane (C20) | 12.399 | 6441586 | 49.442 ug/ml |
| 11) T | n-Heneicosane (C21) | 13.010 | 6154772 | 48.142 ug/ml |
| 13) T | n-Docosane (C22) | 13.595 | 6104328 | 48.436 ug/ml |
| 14) T | n-Tetracosane (C24) | 14.697 | 5990514 | 48.164 ug/ml |
| 15) T | n-Hexacosane (C26) | 15.715 | 5861152 | 48.203 ug/ml |
| 16) T | n-Octacosane (C28) | 16.664 | 5725382 | 48.207 ug/ml |
| 17) T | n-Tricontane (C30) | 17.551 | 5737111 | 47.664 ug/ml |
| 18) T | n-Dotriacontane (C32) | 18.381 | 5715622 | 49.244 ug/ml |
| 19) T | n-Tetratriacontane (C34) | 19.163 | 5668029 | 52.453 ug/ml |
| 20) T | n-Hexatriacontane (C36) | 19.902 | 5431820 | 56.482 ug/ml |
| 21) T | n-Octatriacontane (C38) | 20.616 | 5265474 | 58.572 ug/ml |
| 22) T | n-Tetracontane (C40) | 21.470 | 5078129 | 58.693 ug/ml |

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

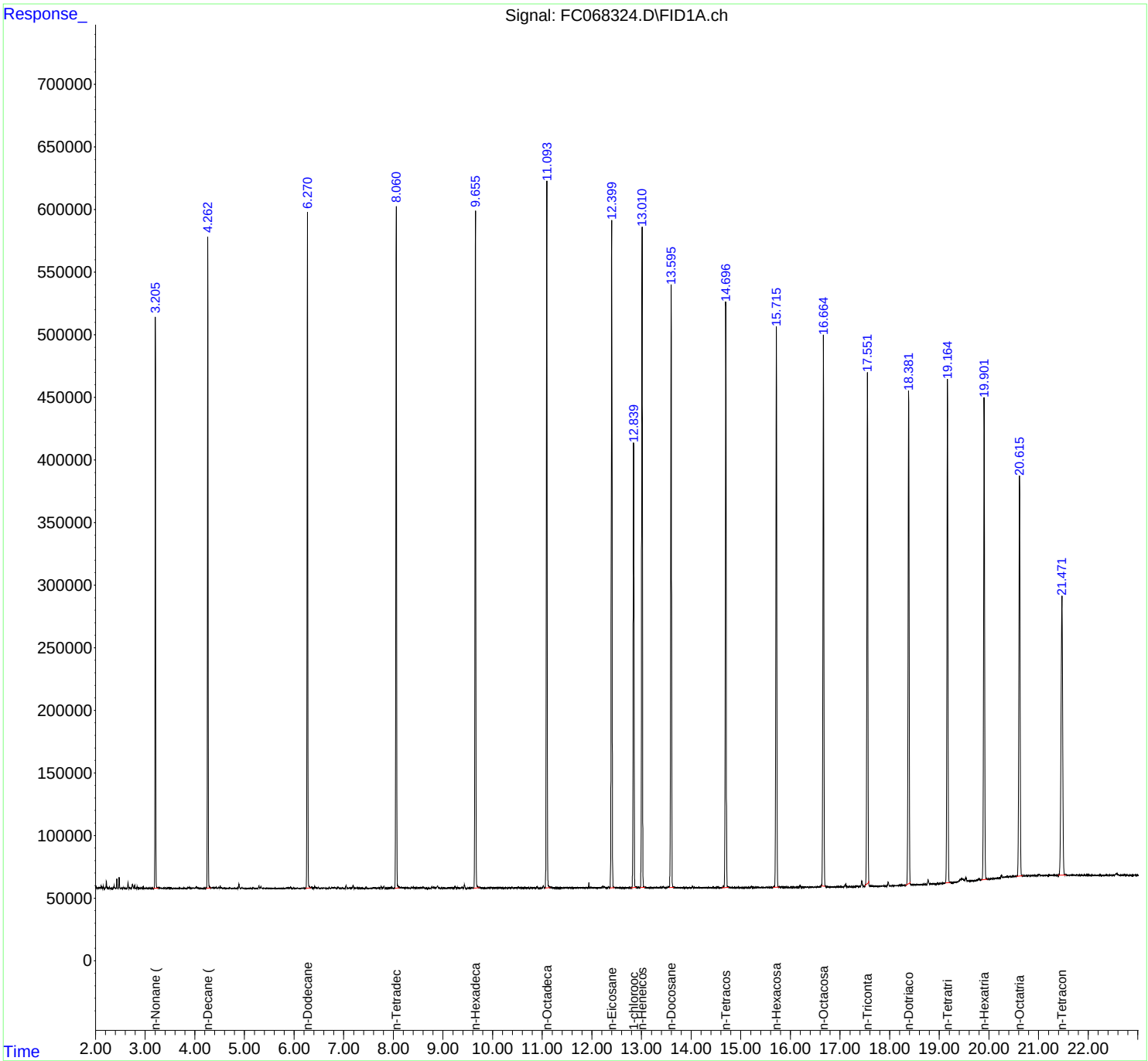
Quantitation Report (QT Reviewed)

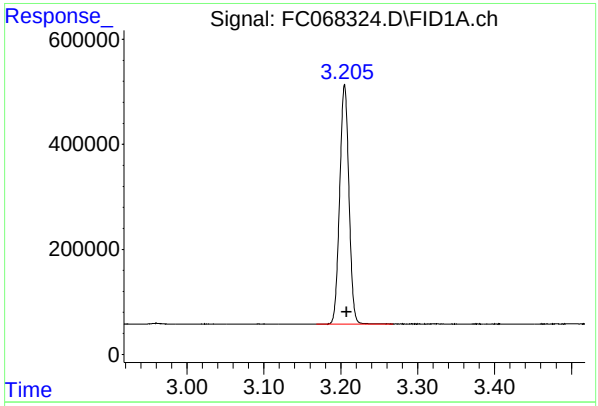
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022825AL\
Data File : FC068324.D
Signal(s) : FID1A.ch
Acq On : 28 Feb 2025 12:13
Operator : YP/AJ
Sample : PB166923BSD
Misc :
ALS Vial : 13 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
PB166923BSD

Integration File: autoint1.e
Quant Time: Mar 05 05:23:15 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

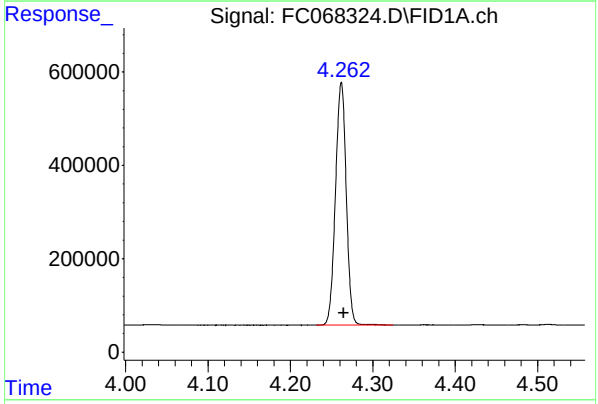





#1 n-Nonane (C9)

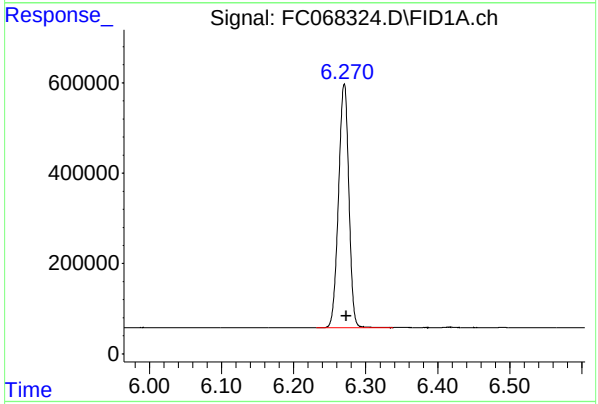
R.T.: 3.205 min
Delta R.T.: -0.003 min
Response: 3794951
Conc: 26.98 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
PB166923BSD



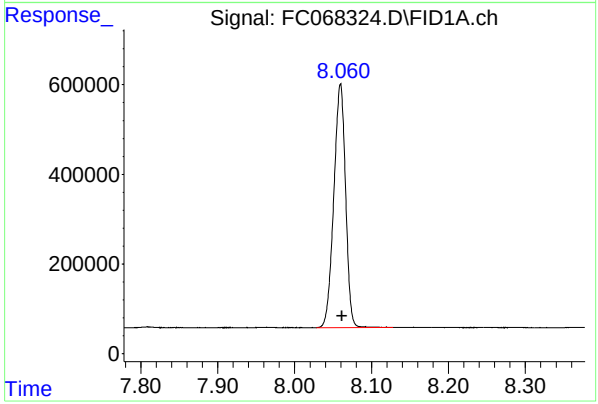

#2 n-Decane (C10)

R.T.: 4.262 min
Delta R.T.: -0.003 min
Response: 4712176
Conc: 33.26 ug/ml



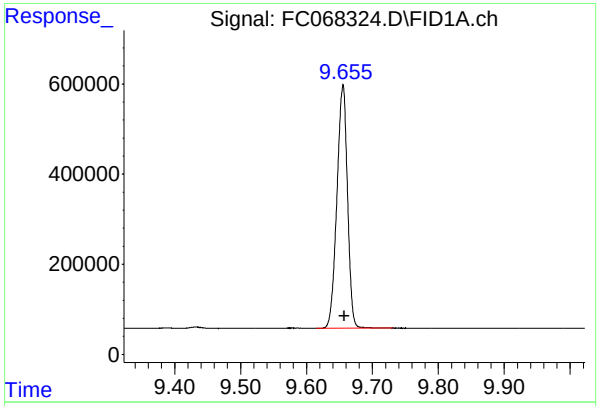

#4 n-Dodecane (C12)

R.T.: 6.270 min
Delta R.T.: -0.003 min
Response: 5382829
Conc: 38.24 ug/ml




#6 n-Tetradecane (C14)

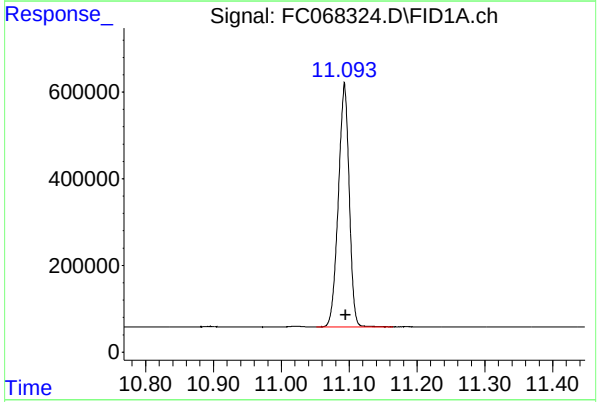
R.T.: 8.059 min
Delta R.T.: -0.002 min
Response: 5779518
Conc: 42.39 ug/ml




#7 n-Hexadecane (C16)

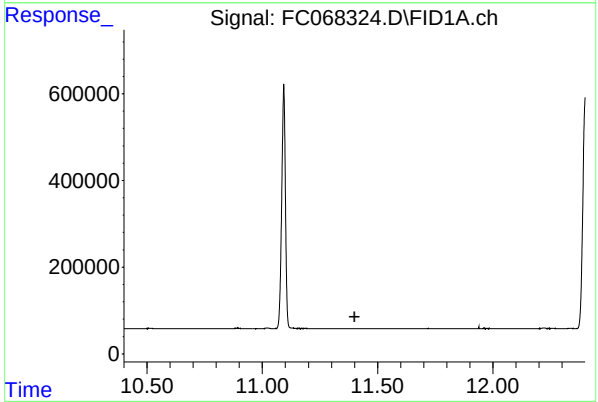
R.T.: 9.655 min
Delta R.T.: -0.002 min
Response: 6016543
Conc: 43.93 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
PB166923BSD



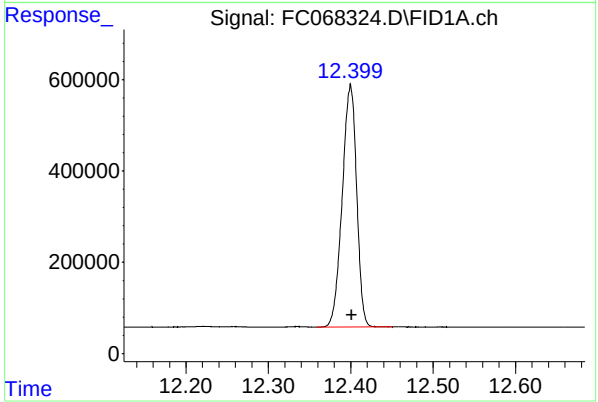

#8 n-Octadecane (C18)

R.T.: 11.093 min
Delta R.T.: -0.002 min
Response: 6243297
Conc: 45.65 ug/ml



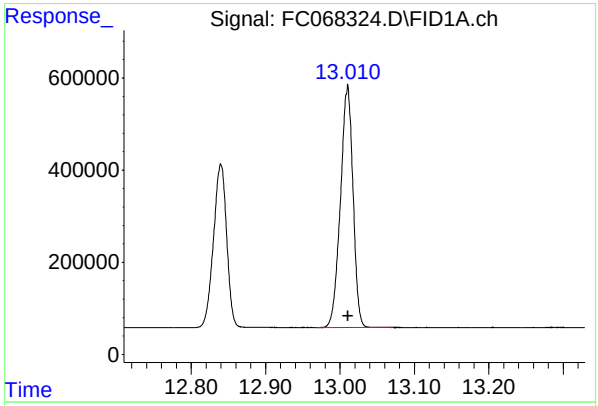

#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.400 min
Response: 0
Conc: N.D.




#10 n-Eicosane (C20)

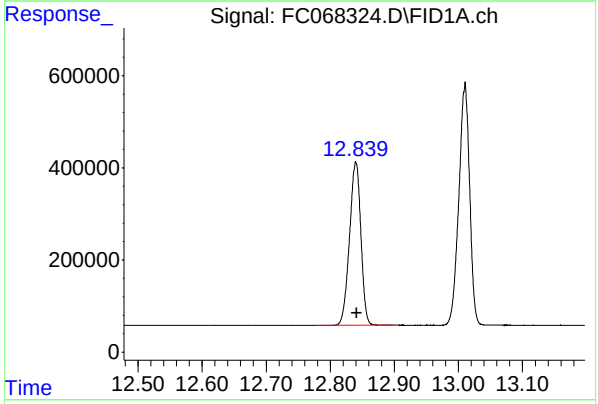
R.T.: 12.399 min
Delta R.T.: -0.001 min
Response: 6441586
Conc: 49.44 ug/ml




#11 n-Heneicosane (C21)

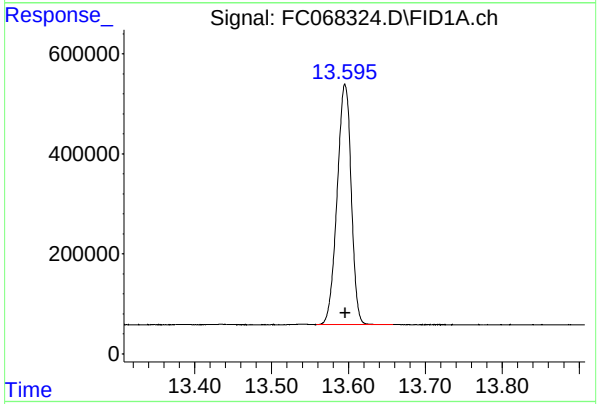
R.T.: 13.010 min
Delta R.T.: 0.000 min
Response: 6154772
Conc: 48.14 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
PB166923BSD



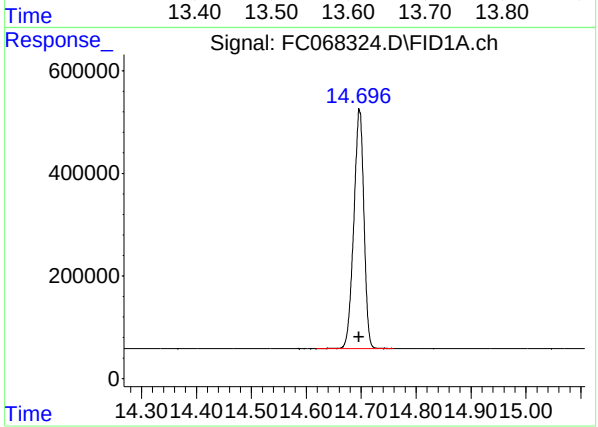

#12 1-chlorooctadecane (SURR)

R.T.: 12.840 min
Delta R.T.: -0.002 min
Response: 4356774
Conc: 38.74 ug/ml



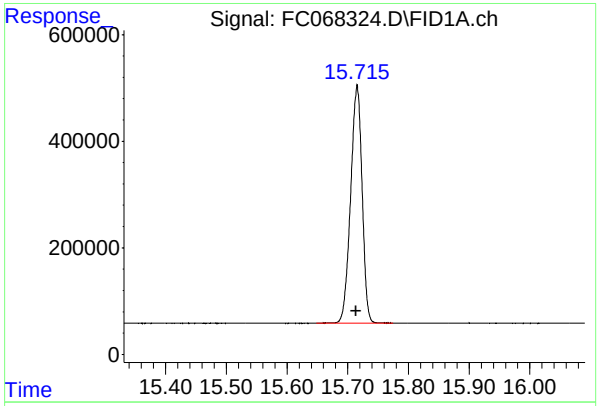

#13 n-Docosane (C22)

R.T.: 13.595 min
Delta R.T.: 0.000 min
Response: 6104328
Conc: 48.44 ug/ml




#14 n-Tetracosane (C24)

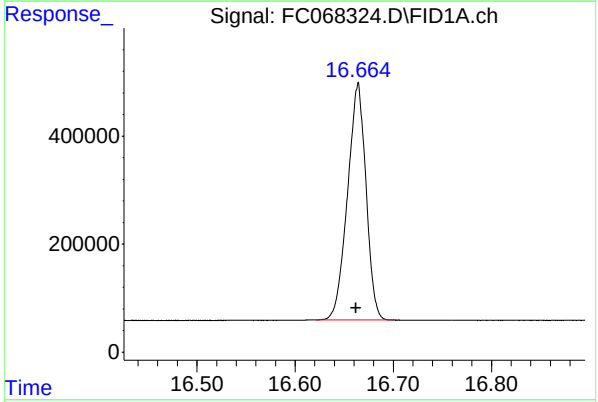
R.T.: 14.697 min
Delta R.T.: 0.000 min
Response: 5990514
Conc: 48.16 ug/ml




#15 n-Hexacosane (C26)

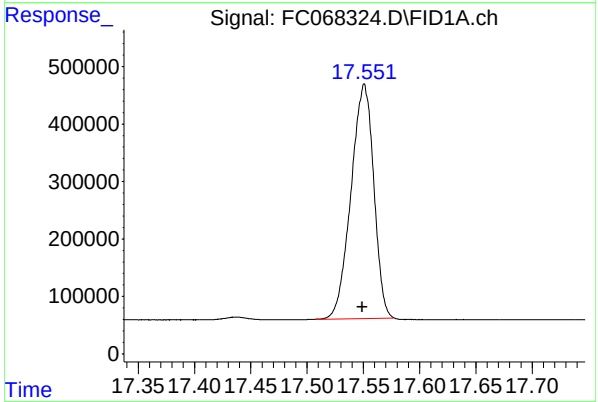
R.T.: 15.715 min
Delta R.T.: 0.001 min
Response: 5861152
Conc: 48.20 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
PB166923BSD



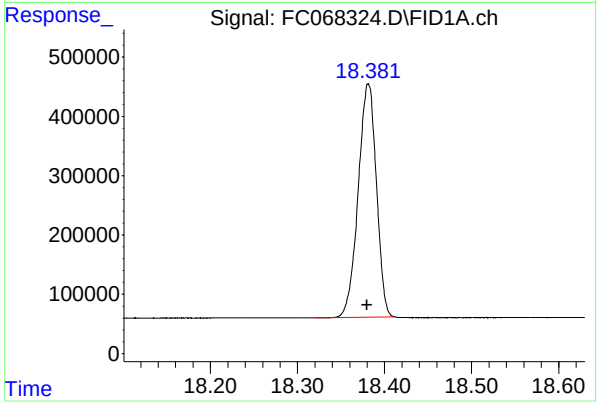

#16 n-Octacosane (C28)

R.T.: 16.664 min
Delta R.T.: 0.002 min
Response: 5725382
Conc: 48.21 ug/ml



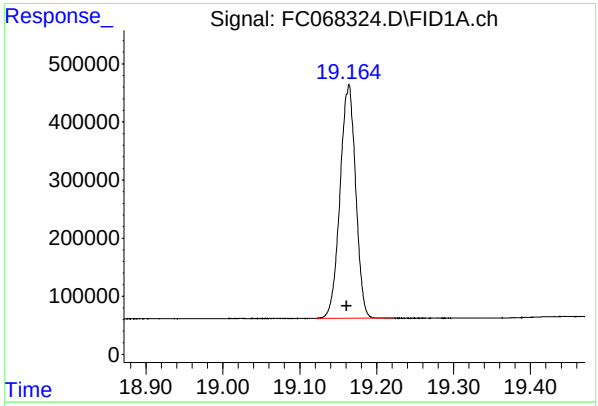

#17 n-Tricontane (C30)

R.T.: 17.551 min
Delta R.T.: 0.002 min
Response: 5737111
Conc: 47.66 ug/ml




#18 n-Dotriacontane (C32)

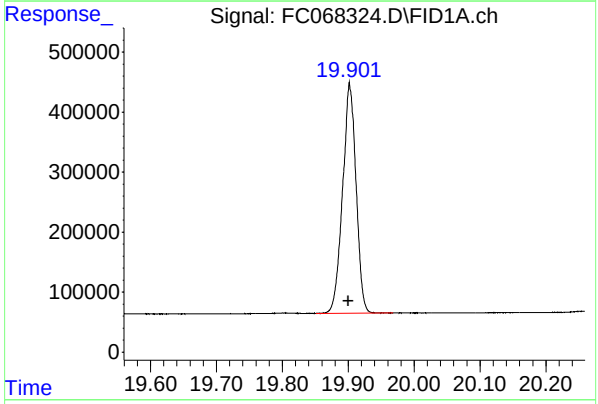
R.T.: 18.381 min
Delta R.T.: 0.002 min
Response: 5715622
Conc: 49.24 ug/ml




#19 n-Tetratriacontane (C34)

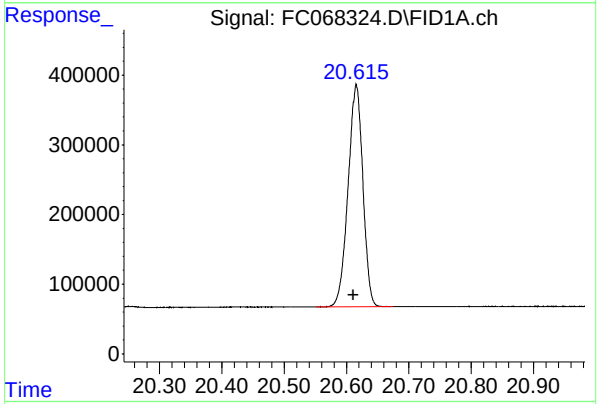
R.T.: 19.163 min
Delta R.T.: 0.002 min
Response: 5668029
Conc: 52.45 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
PB166923BSD



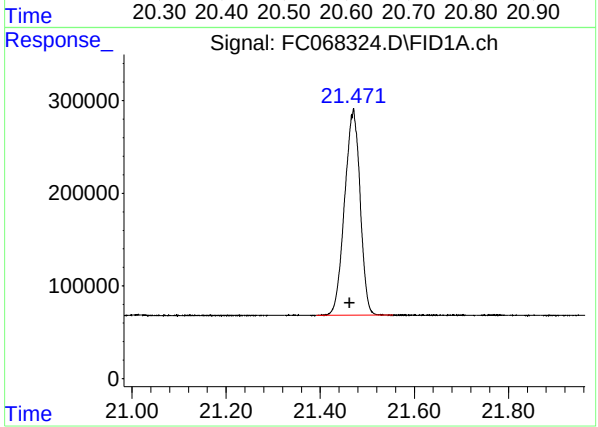

#20 n-Hexatriacontane (C36)

R.T.: 19.902 min
Delta R.T.: 0.002 min
Response: 5431820
Conc: 56.48 ug/ml




#21 n-Octatriacontane (C38)

R.T.: 20.616 min
Delta R.T.: 0.005 min
Response: 5265474
Conc: 58.57 ug/ml




#22 n-Tetracontane (C40)

R.T.: 21.470 min
Delta R.T.: 0.007 min
Response: 5078129
Conc: 58.69 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022825AL\
Data File : FC068324.D
Signal(s) : FID1A.ch
Acq On : 28 Feb 2025 12:13
Sample : PB166923BSD
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Title : GC Extractables

Signal : FID1A.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 3.205 | 3.168 | 3.268 | BB | 454324 | 3794951 | 58.91% | 3.592% |
| 2 | 4.262 | 4.231 | 4.325 | BB | 517887 | 4712176 | 73.15% | 4.460% |
| 3 | 6.270 | 6.231 | 6.338 | BB | 544816 | 5382829 | 83.56% | 5.095% |
| 4 | 8.059 | 8.028 | 8.128 | BB | 537206 | 5779518 | 89.72% | 5.471% |
| 5 | 9.655 | 9.615 | 9.731 | BB | 535033 | 6016543 | 93.40% | 5.695% |
| 6 | 11.093 | 11.051 | 11.165 | BB | 558187 | 6243297 | 96.92% | 5.910% |
| 7 | 12.399 | 12.358 | 12.451 | BB | 523836 | 6441586 | 100.00% | 6.097% |
| 8 | 12.840 | 12.778 | 12.898 | BB | 356315 | 4356774 | 67.64% | 4.124% |
| 9 | 13.010 | 12.968 | 13.071 | BB | 522913 | 6154772 | 95.55% | 5.826% |
| 10 | 13.595 | 13.558 | 13.658 | BB | 481011 | 6104328 | 94.76% | 5.778% |
| 11 | 14.697 | 14.618 | 14.758 | BB | 467416 | 5990514 | 93.00% | 5.671% |
| 12 | 15.715 | 15.648 | 15.775 | BB | 442423 | 5861152 | 90.99% | 5.548% |
| 13 | 16.664 | 16.598 | 16.728 | BB | 439005 | 5768706 | 89.55% | 5.461% |
| 14 | 17.551 | 17.491 | 17.608 | BB | 410276 | 5827258 | 90.46% | 5.516% |
| 15 | 18.381 | 18.315 | 18.445 | BB | 395852 | 5765342 | 89.50% | 5.457% |
| 16 | 19.163 | 19.121 | 19.221 | BB | 404106 | 5668029 | 87.99% | 5.365% |
| 17 | 19.902 | 19.851 | 19.968 | BB | 380790 | 5431820 | 84.32% | 5.142% |
| 18 | 20.616 | 20.551 | 20.675 | BB | 316762 | 5265474 | 81.74% | 4.984% |
| 19 | 21.470 | 21.391 | 21.555 | BB | 222869 | 5078129 | 78.83% | 4.807% |

Sum of corrected areas: 105643198

Aliphatic EPH 021125.M Sat Mar 01 01:23:32 2025

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

# Report of Analysis

| | | | | | |
|---|---|---|---|---|---|
| Client: | Weston Solutions, Inc. | | Date Collected: | | |
| Project: | RFP 905 | | Date Received: | | |
| Client Sample ID: | PB166923BSD | | SDG No.: | Q1421 | |
| Lab Sample ID: | PB166923BSD | | Matrix: | Solid | |
| Analytical Method: | NJEPH | | % Solid: | 100 | |
| Sample Wt/Vol: | 30.02 | Units: g | Final Vol: | 2000 | uL |
| Soil Aliquot Vol: | | uL | Test: | EPH | |
| Prep Method : | | | | | |

| File ID : | Dilution: | Prep Date : | Date Analyzed : | Prep Batch ID |
|---|---|---|---|---|
| FD049132.D | 1 | 02/27/25 | 02/28/25 | PB166923 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| Aromatic C10-C12 | Aromatic C10-C12 | 6.56 | | 0.30 | 0.67 | mg/kg |
| Aromatic C12-C16 | Aromatic C12-C16 | 11.3 | | 0.34 | 1.00 | mg/kg |
| Aromatic C16-C21 | Aromatic C16-C21 | 21.8 | | 0.96 | 1.67 | mg/kg |
| Aromatic C21-C36 | Aromatic C21-C36 | 34.9 | | 2.00 | 2.66 | mg/kg |
| **SURROGATES** | | | | | | |
| 580-13-2 | 2-Bromonaphthalene (SURR) | 59.0 | | 40 - 140 | 118% | SPK: 50 |
| 321-60-8 | 2-Flurobiphenyl (SURR) | 63.0 | | 40 - 140 | 126% | SPK: 50 |
| 84-15-1 | ortho-Terphenyl (SURR) | 53.6 | | 40 - 140 | 107% | SPK: 50 |

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

# Quantitation Report For Aromatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | PB166923BSD | Acq On: | 28 Feb 2025 12:13 |
| Client Sample ID: | PB166923BSD | Operator: | YP/AJ |
| Data file: | FD049132.D | Misc: | |
| Instrument: | FID_D | ALS Vial: | 63 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aromatic C10-C12 | 4.076 | 5.794 | 15663141 | 98.498 | 200 | ug/ml |
| Aromatic C12-C16 | 5.795 | 8.396 | 27228831 | 169.191 | 300 | ug/ml |
| Aromatic C16-C21 | 8.397 | 12.661 | 50286158 | 327.898 | 500 | ug/ml |
| Aromatic C21-C36 | 12.662 | 18.073 | 74965222 | 523.812 | 800 | ug/ml |
| Aromatic EPH | 4.076 | 18.073 | 168143352 | 1120 | | ug/ml |
| ortho-Terphenyl (SURR) | 11.237 | 11.237 | 8675284 | 53.63 | | ug/ml |
| 2-Bromonaphthalene (SURR) | 7.352 | 7.352 | 8444315 | 59.01 | | ug/ml |
| 2-Flurobiphenyl (SURR) | 8.203 | 8.203 | 5539761 | 63.01 | | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022825AR\
Data File : FD049132.D
Signal(s) : FID2B.ch
Acq On : 28 Feb 2025 12:13
Operator : YP/AJ
Sample : PB166923BSD
Misc :
ALS Vial : 63 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
PB166923BSD

Integration File: autoint1.e
Quant Time: Mar 01 02:17:35 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

| | Compound | R.T. | Response | Conc Units |
|---|---|---|---|---|
| | **System Monitoring Compounds** | | | |
| 4) | S 2-Bromonaphthalene (S... | 7.352 | 8444315 | 59.006 ug/ml |
| | Spiked Amount 50.000 | | Recovery = 118.01% | |
| 6) | S 2-Flurobiphenyl (SURR) | 8.203 | 5539761 | 63.015 ug/ml |
| | Spiked Amount 50.000 Range 0 - 131 | | Recovery = 126.03% | |
| 11) | S ortho-Terphenyl (SURR) | 11.237 | 8675284 | 53.626 ug/ml |
| | Spiked Amount 50.000 | | Recovery = 107.25% | |
| | **Target Compounds** | | | |
| 1) | T 1,2,3-Trimethylbenzen... | 4.177 | 7363423 | 46.237 ug/ml |
| 2) | T Naphthalene (C11.7) | 5.693 | 8299718 | 52.269 ug/ml |
| 3) | T 2-Methylnaphthalene (... | 6.739 | 8179915 | 52.539 ug/ml |
| 5) | T Acenaphthylene (C15.06) | 8.006 | 9241947 | 56.837 ug/ml |
| 7) | T Acenaphthene (C15.5) | 8.301 | 9806969 | 59.614 ug/ml |
| 8) | T Flouorene (C16.55) | 9.079 | 9794107 | 62.126 ug/ml |
| 9) | T Phenanthrene (C19.36) | 10.467 | 9953645 | 66.049 ug/ml |
| 10) | T Anthracene (C19.43) | 10.543 | 10019118 | 66.339 ug/ml |
| 12) | T Fluoranthene (C21.85) | 12.273 | 10371581 | 67.210 ug/ml |
| 13) | T Pyrene (C20.8) | 12.567 | 10147707 | 65.869 ug/ml |
| 14) | T Benzo[a]anthracene (C... | 14.437 | 9644699 | 73.405 ug/ml |
| 15) | T Chrysene (C27.41) | 14.480 | 9454131 | 58.472 ug/ml |
| 16) | T benzo[b]fluoranthene ... | 15.988 | 9628743 | 69.979 ug/ml |
| 17) | T Bnezo[k]fluoranthene ... | 16.022 | 9681524 | 61.298 ug/ml |
| 18) | T Benzo[a]pyrene (C31.34) | 16.364 | 9238467 | 68.062 ug/ml |
| 19) | T Indeno[1,2,3-cd]pyren... | 17.734 | 8949996 | 81.902 ug/ml |
| 20) | T Dibenz[a,h]anthracene... | 17.767 | 9240484 | 59.562 ug/ml |
| 21) | T Benzo[g,h,i]perylene ... | 17.985 | 9127178 | 62.967 ug/ml |

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

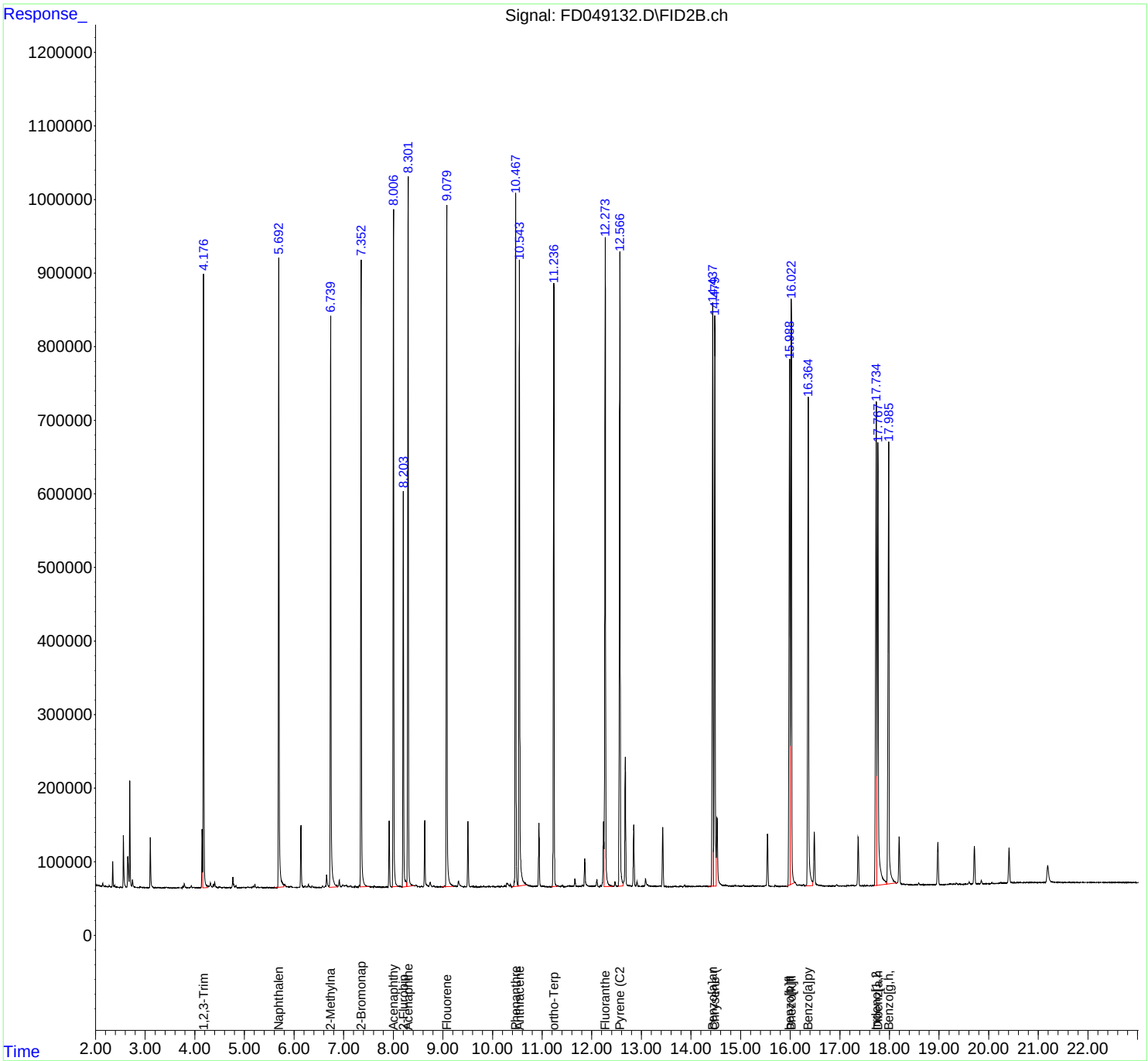
Quantitation Report (QT Reviewed)

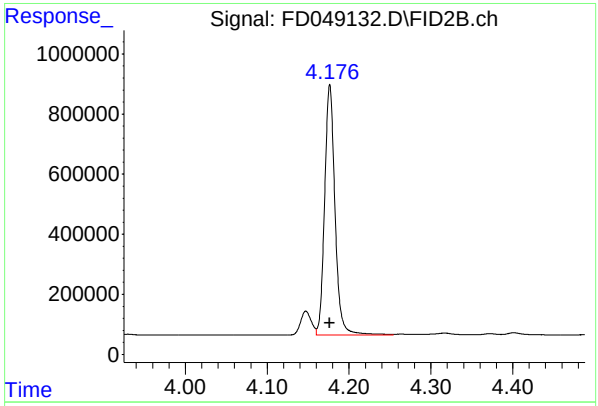
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022825AR\
Data File : FD049132.D
Signal(s) : FID2B.ch
Acq On : 28 Feb 2025 12:13
Operator : YP/AJ
Sample : PB166923BSD
Misc :
ALS Vial : 63 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
PB166923BSD

Integration File: autoint1.e
Quant Time: Mar 01 02:17:35 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

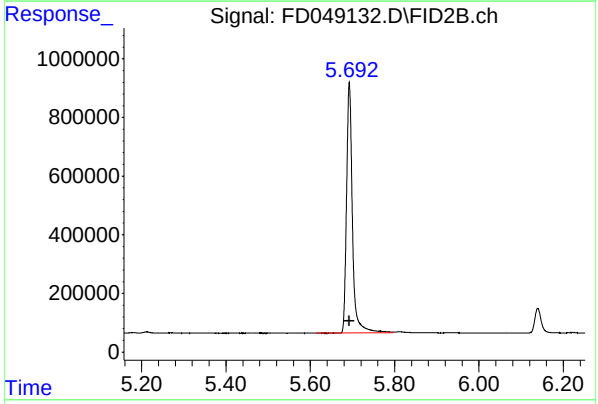





#1 1,2,3-Trimethylbenzene (C10.1)

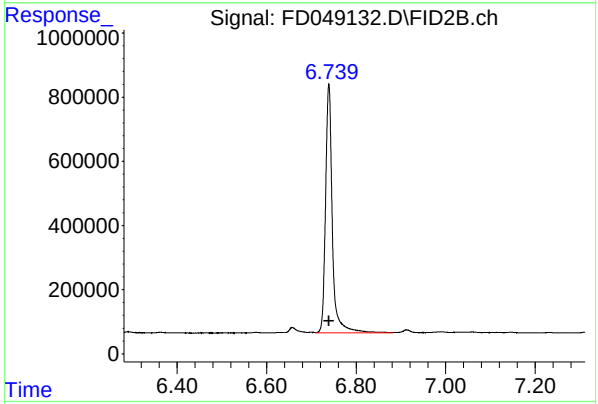
R.T.: 4.177 min
Delta R.T.: 0.000 min
Response: 7363423
Conc: 46.24 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
PB166923BSD



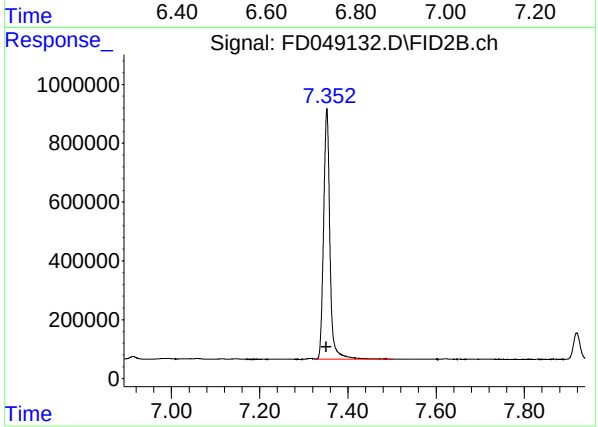

#2 Naphthalene (C11.7)

R.T.: 5.693 min
Delta R.T.: 0.000 min
Response: 8299718
Conc: 52.27 ug/ml



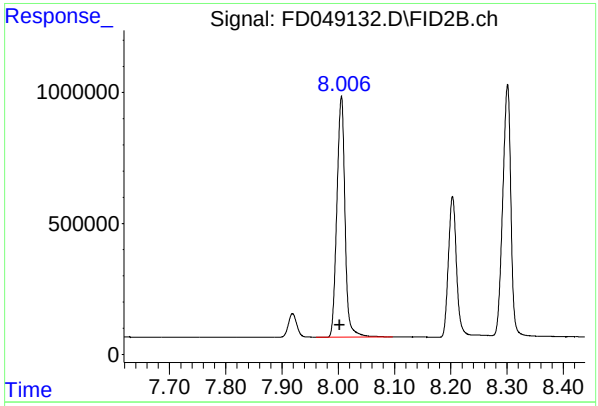

#3 2-Methylnaphthalene (C12.89)

R.T.: 6.739 min
Delta R.T.: 0.000 min
Response: 8179915
Conc: 52.54 ug/ml




#4 2-Bromonaphthalene (SURR)

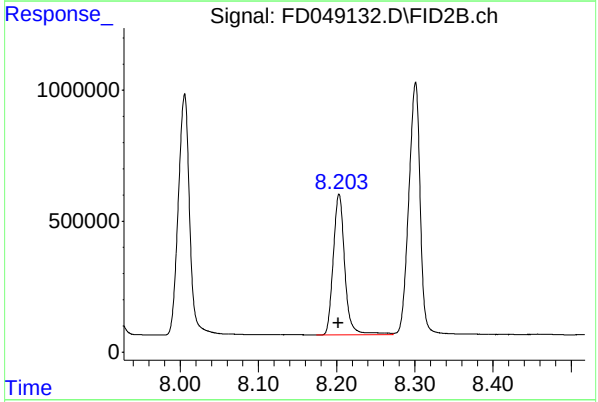
R.T.: 7.352 min
Delta R.T.: 0.001 min
Response: 8444315
Conc: 59.01 ug/ml




#5 Acenaphthylene (C15.06)

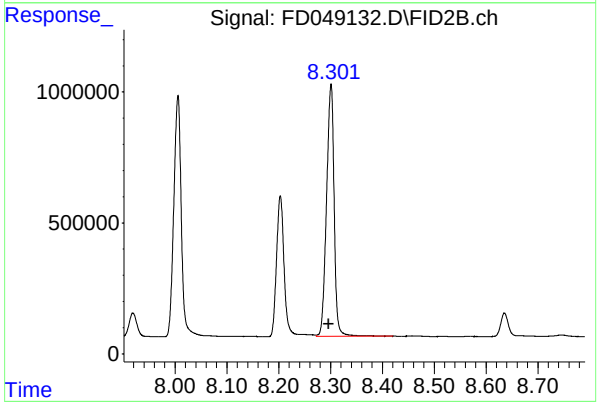
R.T.: 8.006 min
Delta R.T.: 0.003 min
Response: 9241947
Conc: 56.84 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
PB166923BSD



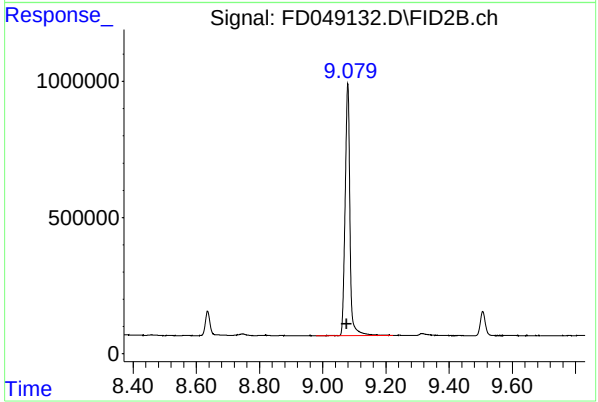

#6 2-Flurobiphenyl (SURR)

R.T.: 8.203 min
Delta R.T.: 0.000 min
Response: 5539761
Conc: 63.01 ug/ml



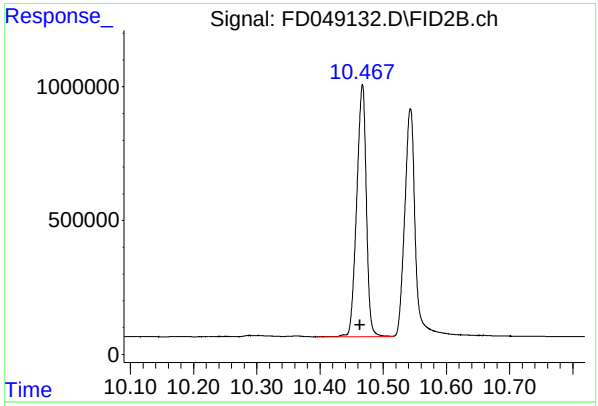

#7 Acenaphthene (C15.5)

R.T.: 8.301 min
Delta R.T.: 0.005 min
Response: 9806969
Conc: 59.61 ug/ml




#8 Flouorene (C16.55)

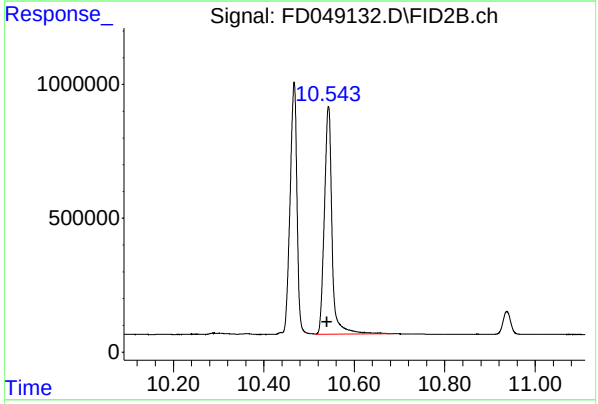
R.T.: 9.079 min
Delta R.T.: 0.003 min
Response: 9794107
Conc: 62.13 ug/ml




#9 Phenanthrene (C19.36)

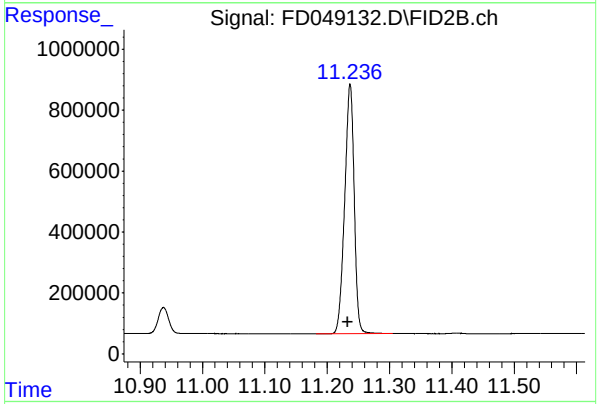
R.T.: 10.467 min
Delta R.T.: 0.004 min
Response: 9953645
Conc: 66.05 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
PB166923BSD



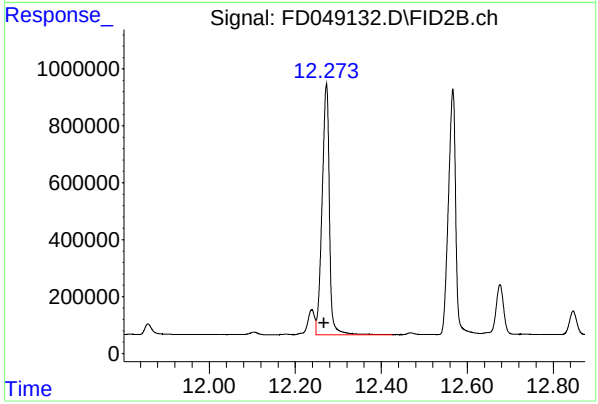

#10 Anthracene (C19.43)

R.T.: 10.543 min
Delta R.T.: 0.004 min
Response: 10019118
Conc: 66.34 ug/ml



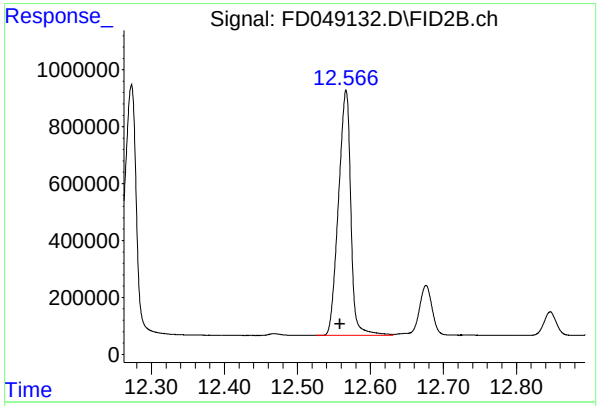

#11 ortho-Terphenyl (SURR)

R.T.: 11.237 min
Delta R.T.: 0.004 min
Response: 8675284
Conc: 53.63 ug/ml




#12 Fluoranthene (C21.85)

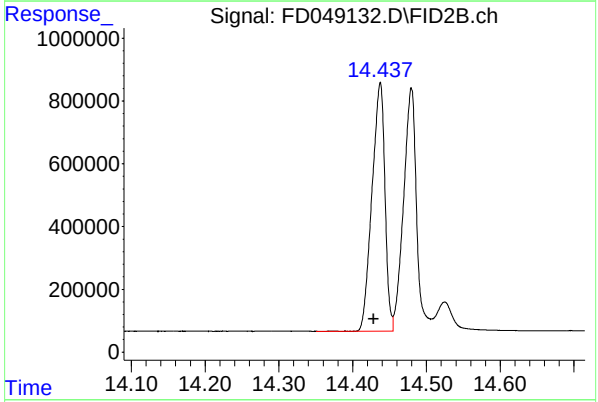
R.T.: 12.273 min
Delta R.T.: 0.006 min
Response: 10371581
Conc: 67.21 ug/ml




#13 Pyrene (C20.8)

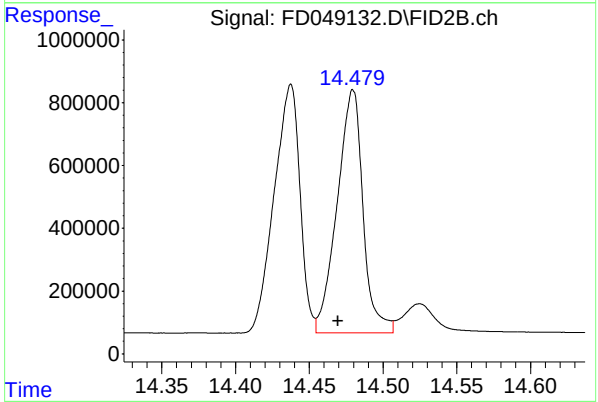
R.T.: 12.567 min
Delta R.T.: 0.008 min
Response: 10147707
Conc: 65.87 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
PB166923BSD



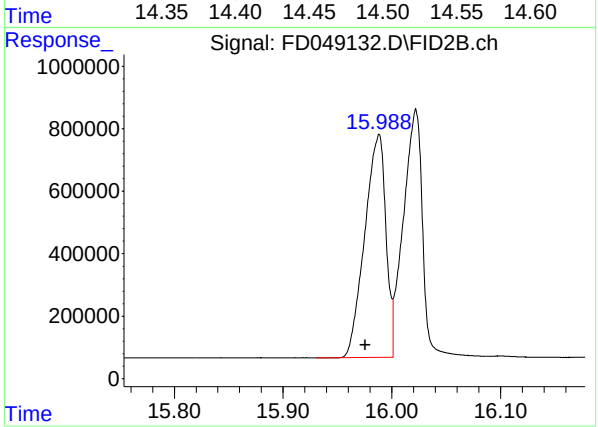

#14 Benzo[a]anthracene (C26.37)

R.T.: 14.437 min
Delta R.T.: 0.009 min
Response: 9644699
Conc: 73.41 ug/ml



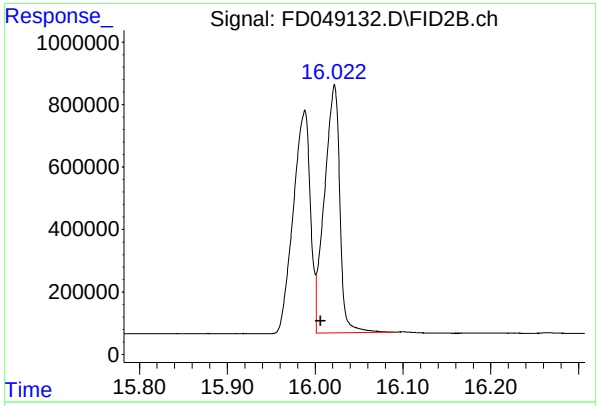

#15 Chrysene (C27.41)

R.T.: 14.480 min
Delta R.T.: 0.010 min
Response: 9454131
Conc: 58.47 ug/ml




#16 benzo[b]fluoranthene (C30.41)

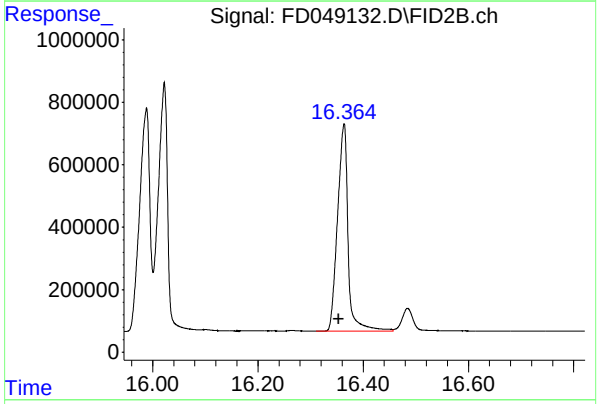
R.T.: 15.988 min
Delta R.T.: 0.013 min
Response: 9628743
Conc: 69.98 ug/ml




#17 Bnezo[k]fluoranthene (C30.14)

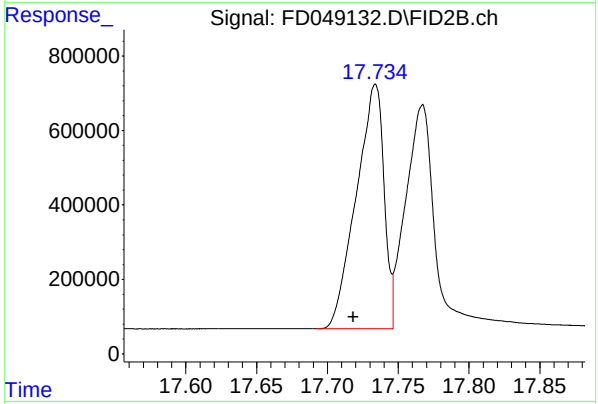
R.T.: 16.022 min
Delta R.T.: 0.016 min
Response: 9681524
Conc: 61.30 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
PB166923BSD



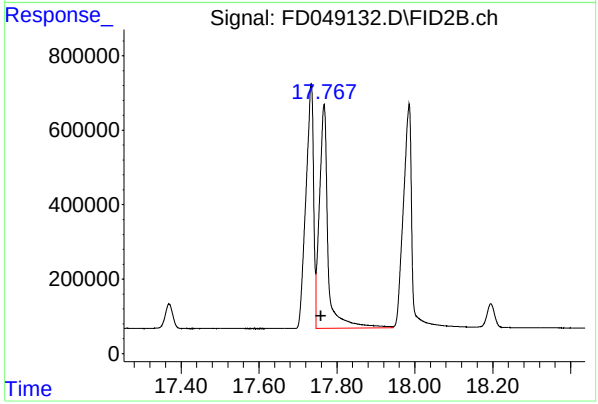

#18 Benzo[a]pyrene (C31.34)

R.T.: 16.364 min
Delta R.T.: 0.010 min
Response: 9238467
Conc: 68.06 ug/ml



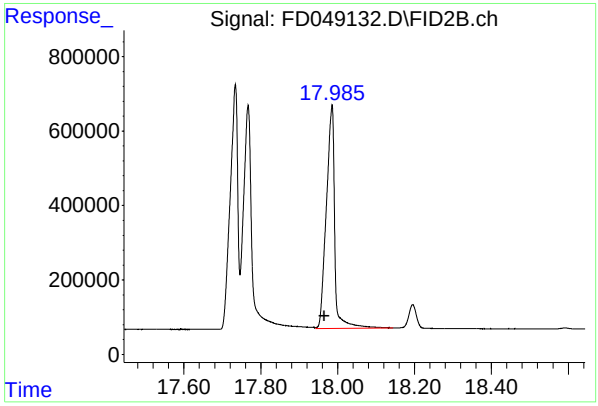

#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.734 min
Delta R.T.: 0.016 min
Response: 8949996
Conc: 81.90 ug/ml




#20 Dibenz[a,h]anthracene (C30.36)

R.T.: 17.767 min
Delta R.T.: 0.008 min
Response: 9240484
Conc: 59.56 ug/ml




#21 Benzo[g,h,i]perylene (C34.01)

R.T.: 17.985 min
Delta R.T.: 0.019 mi
Response: 9127178
Conc: 62.97 ug/m

**Instrument :**
FID_D
**ClientSampleId :**
PB166923BSD

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022825AR\
Data File : FD049132.D
Signal(s) : FID2B.ch
Acq On : 28 Feb 2025 12:13
Sample : PB166923BSD
Misc :
ALS Vial : 63 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Title : GC Extractables

Signal : FID2B.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 4.177 | 4.160 | 4.254 | VV | 833763 | 7363423 | 71.00% | 3.859% |
| 2 | 5.693 | 5.614 | 5.796 | BV | 854382 | 8299718 | 80.02% | 4.350% |
| 3 | 6.739 | 6.710 | 6.882 | VV | 774369 | 8179915 | 78.87% | 4.287% |
| 4 | 7.352 | 7.328 | 7.502 | VV | 850747 | 8444315 | 81.42% | 4.426% |
| 5 | 8.006 | 7.960 | 8.097 | BV | 918197 | 9241947 | 89.11% | 4.844% |
| 6 | 8.203 | 8.174 | 8.272 | BV | 537561 | 5539761 | 53.41% | 2.903% |
| 7 | 8.301 | 8.272 | 8.420 | VB | 960907 | 9806969 | 94.56% | 5.140% |
| 8 | 9.079 | 8.979 | 9.222 | BV | 923928 | 9794107 | 94.43% | 5.133% |
| 9 | 10.467 | 10.394 | 10.515 | PV | 942889 | 9953645 | 95.97% | 5.217% |
| 10 | 10.543 | 10.515 | 10.685 | VV | 852864 | 10019118 | 96.60% | 5.251% |
| 11 | 11.237 | 11.182 | 11.305 | BV | 818909 | 8675284 | 83.64% | 4.547% |
| 12 | 12.273 | 12.248 | 12.427 | VB | 878971 | 10371581 | 100.00% | 5.436% |
| 13 | 12.567 | 12.525 | 12.631 | BV | 861958 | 10147707 | 97.84% | 5.318% |
| 14 | 14.437 | 14.350 | 14.455 | BV | 792508 | 9644699 | 92.99% | 5.055% |
| 15 | 14.480 | 14.455 | 14.507 | VV | 775232 | 9454131 | 91.15% | 4.955% |
| 16 | 15.988 | 15.930 | 16.001 | BV | 716576 | 9628743 | 92.84% | 5.046% |
| 17 | 16.022 | 16.001 | 16.089 | VV | 793985 | 9681524 | 93.35% | 5.074% |
| 18 | 16.364 | 16.310 | 16.457 | BV | 664714 | 9238467 | 89.07% | 4.842% |
| 19 | 17.734 | 17.692 | 17.746 | BV | 656393 | 8949996 | 86.29% | 4.691% |
| 20 | 17.767 | 17.746 | 17.944 | VV | 600565 | 9240484 | 89.09% | 4.843% |
| 21 | 17.985 | 17.944 | 18.144 | VV | 600259 | 9127178 | 88.00% | 4.784% |

Sum of corrected areas: 190802711

Aromatic EPH 021125.M Sat Mar 01 03:55:20 2025

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Weston Solutions, Inc. | Date Collected: | 02/24/25 |
| Project: | RFP 905 | Date Received: | 02/24/25 |
| Client Sample ID: | P001-CLAY-CF01-01MS | SDG No.: | Q1421 |
| Lab Sample ID: | Q1421-02 | Matrix: | Solid |
| Analytical Method: | NJEPH | % Solid: | 70.3 |
| Sample Wt/Vol: | 30.07 Units: g | Final Vol: | 2000 uL |
| Soil Aliquot Vol: | uL | Test: | EPH |
| Prep Method : | | | |

| File ID : | Dilution: | Prep Date : | Date Analyzed : | Prep Batch ID |
|---|---|---|---|---|
| FC068334.D | 1 | 02/27/25 | 02/28/25 | PB166923 |

| CAS Number | Parameter | | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | |
| Aliphatic C9-C12 | Aliphatic C9-C12 | | 9.70 | | 0.54 | 1.42 | mg/kg |
| Aliphatic C12-C16 | Aliphatic C12-C16 | | 9.05 | | 0.34 | 0.95 | mg/kg |
| Aliphatic C16-C21 | Aliphatic C16-C21 | | 14.6 | | 0.43 | 1.42 | mg/kg |
| Aliphatic C21-C28 | Aliphatic C21-C28 | | 19.4 | | 1.14 | 1.89 | mg/kg |
| Aliphatic C28-C40 | Aliphatic C28-C40 | | 34.1 | | 2.55 | 2.84 | mg/kg |
| **SURROGATES** | | | | | | | |
| 3383-33-2 | 1-chlorooctadecane (SURR) | | 30.6 | | 40 - 140 | 61% | SPK: 50 |
| 84-15-1 | ortho-Terphenyl (SURR) | | 0.00 | | 40 - 140 | 0% | SPK: 50 |

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

# Quantitation Report For Aliphatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | Q1421-02 | Acq On: | 28 Feb 2025 18:56 |
| Client Sample ID: | P001-CLAY-CF01-01MS | Operator: | YP/AJ |
| Data file: | FC068334.D | Misc: | |
| Instrument: | FID_C | ALS Vial: | 21 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aliphatic C9-C12 | 3.104 | 6.369 | 14464917 | 102.562 | 300 | ug/ml |
| Aliphatic C12-C16 | 6.370 | 9.754 | 13068443 | 95.631 | 200 | ug/ml |
| Aliphatic C16-C21 | 9.755 | 13.107 | 20310392 | 154.298 | 300 | ug/ml |
| Aliphatic C21-C28 | 13.108 | 16.761 | 25151936 | 205.002 | 400 | ug/ml |
| Aliphatic C28-C40 | 16.762 | 21.565 | 37089980 | 360.634 | 600 | ug/ml |
| Aliphatic EPH | 3.104 | 21.565 | 110085668 | 918.128 | | ug/ml |
| ortho-Terphenyl (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |
| 1-chlorooctadecane (SURR) | 12.839 | 12.839 | 3447568 | 30.65 | | ug/ml |
| Aliphatic C9-C28 | 3.104 | 16.761 | 72995688 | 557.493 | 1200 | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022825AL\
Data File : FC068334.D
Signal(s) : FID1A.ch
Acq On : 28 Feb 2025 18:56
Operator : YP/AJ
Sample : Q1421-02
Misc :
ALS Vial : 21 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
P001-CLAY-CF01-01MS

Integration File: autoint1.e
Quant Time: Mar 05 05:24:51 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

| | Compound | R.T. | Response | Conc Units |
|---|---|---|---|---|
| | System Monitoring Compounds | | | |
| 12) S | 1-chlorooctadecane (S... | 12.839 | 3447568 | 30.652 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 61.30% |
| | Target Compounds | | | |
| 1) T | n-Nonane (C9) | 3.205 | 3952679 | 28.098 ug/ml |
| 2) T | n-Decane (C10) | 4.262 | 4756204 | 33.572 ug/ml |
| 4) T | n-Dodecane (C12) | 6.270 | 5217892 | 37.070 ug/ml |
| 6) T | n-Tetradecane (C14) | 8.059 | 5826405 | 42.733 ug/ml |
| 7) T | n-Hexadecane (C16) | 9.655 | 6354609 | 46.396 ug/ml |
| 8) T | n-Octadecane (C18) | 11.093 | 6605667 | 48.302 ug/ml |
| 10) T | n-Eicosane (C20) | 12.400 | 6724652 | 51.614 ug/ml |
| 11) T | n-Heneicosane (C21) | 13.010 | 6406807 | 50.113 ug/ml |
| 13) T | n-Docosane (C22) | 13.596 | 6355786 | 50.432 ug/ml |
| 14) T | n-Tetracosane (C24) | 14.697 | 6236779 | 50.144 ug/ml |
| 15) T | n-Hexacosane (C26) | 15.715 | 6107881 | 50.232 ug/ml |
| 16) T | n-Octacosane (C28) | 16.664 | 5953830 | 50.130 ug/ml |
| 17) T | n-Tricontane (C30) | 17.551 | 5974819 | 49.639 ug/ml |
| 18) T | n-Dotriacontane (C32) | 18.382 | 5932634 | 51.114 ug/ml |
| 19) T | n-Tetratriacontane (C34) | 19.164 | 5900054 | 54.600 ug/ml |
| 20) T | n-Hexatriacontane (C36) | 19.904 | 5653625 | 58.789 ug/ml |
| 21) T | n-Octatriacontane (C38) | 20.616 | 5491943 | 61.091 ug/ml |
| 22) T | n-Tetracontane (C40) | 21.472 | 5316432 | 61.447 ug/ml |

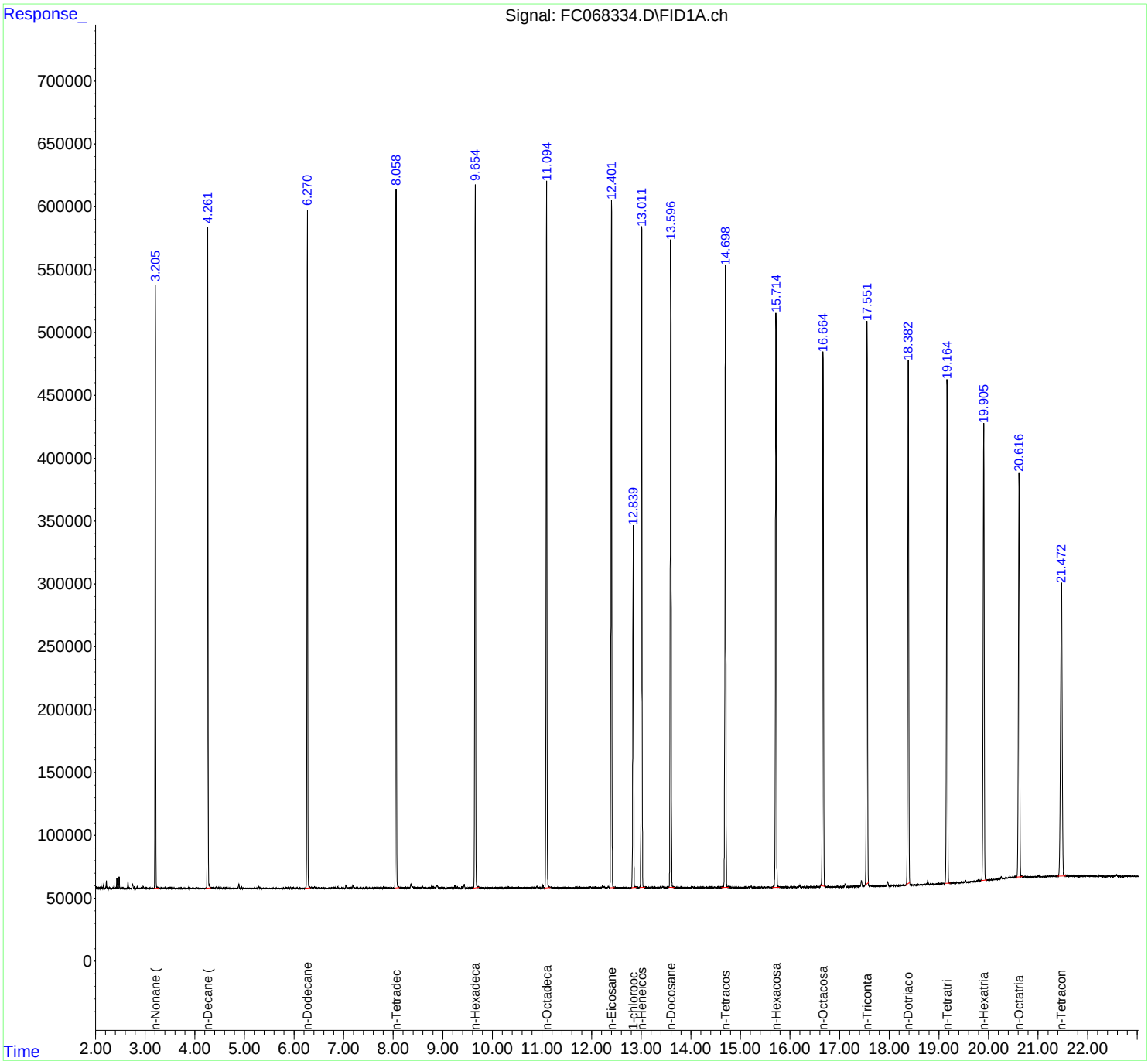
(f)=RT Delta > 1/2 Window (m)=manual int.

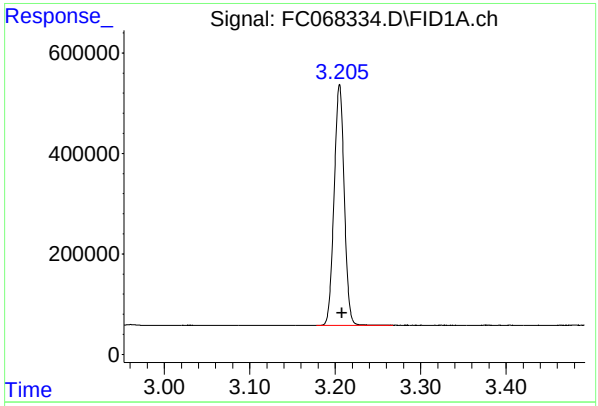
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022825AL\
Data File : FC068334.D
Signal(s) : FID1A.ch
Acq On : 28 Feb 2025 18:56
Operator : YP/AJ
Sample : Q1421-02
Misc :
ALS Vial : 21 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
P001-CLAY-CF01-01MS

Integration File: autoint1.e
Quant Time: Mar 05 05:24:51 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

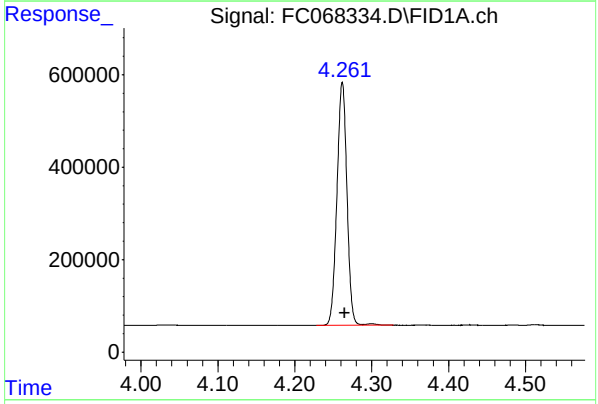





#1 n-Nonane (C9)

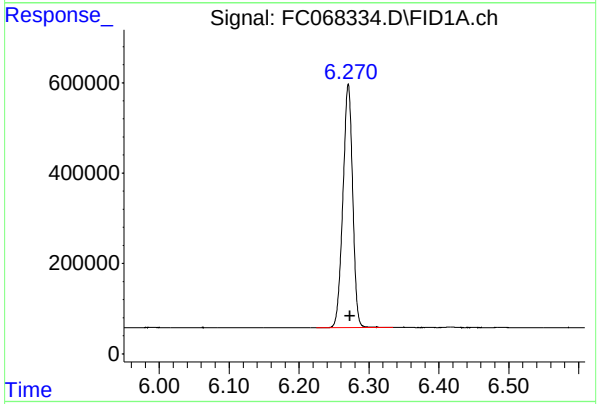
R.T.: 3.205 min
Delta R.T.: -0.003 min
Response: 3952679
Conc: 28.10 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
P001-CLAY-CF01-01MS



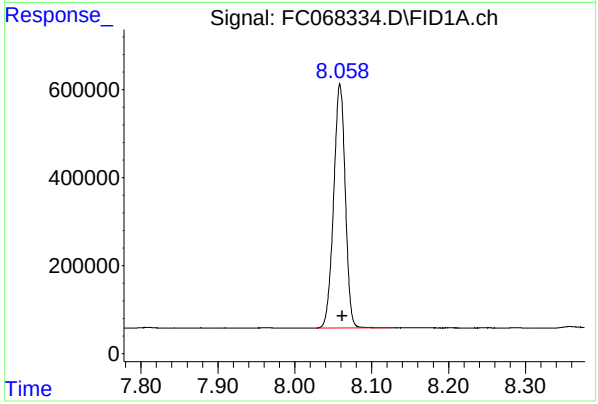

#2 n-Decane (C10)

R.T.: 4.262 min
Delta R.T.: -0.003 min
Response: 4756204
Conc: 33.57 ug/ml



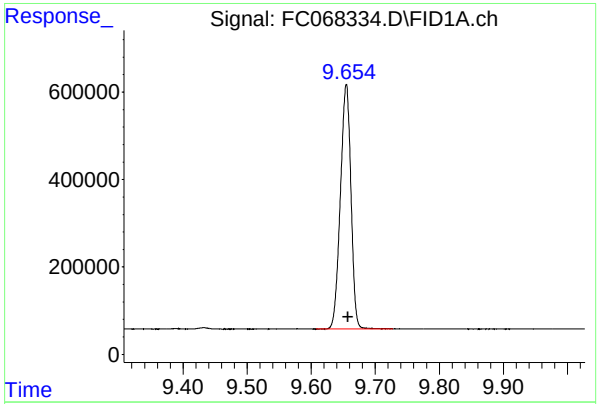

#4 n-Dodecane (C12)

R.T.: 6.270 min
Delta R.T.: -0.003 min
Response: 5217892
Conc: 37.07 ug/ml




#6 n-Tetradecane (C14)

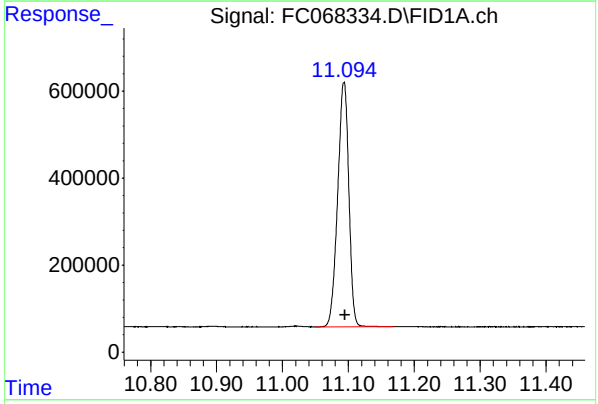
R.T.: 8.059 min
Delta R.T.: -0.003 min
Response: 5826405
Conc: 42.73 ug/ml




#7 n-Hexadecane (C16)

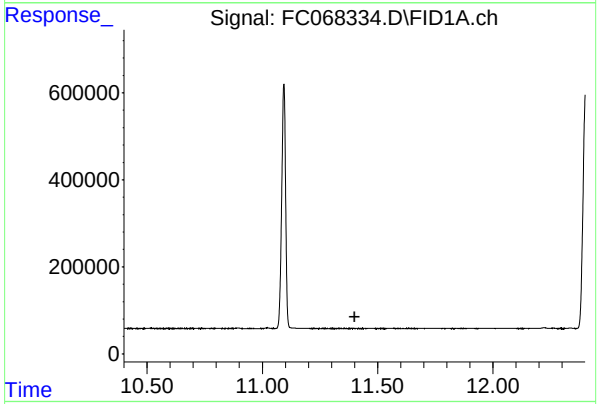
R.T.: 9.655 min
Delta R.T.: -0.003 min
Response: 6354609
Conc: 46.40 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
P001-CLAY-CF01-01MS



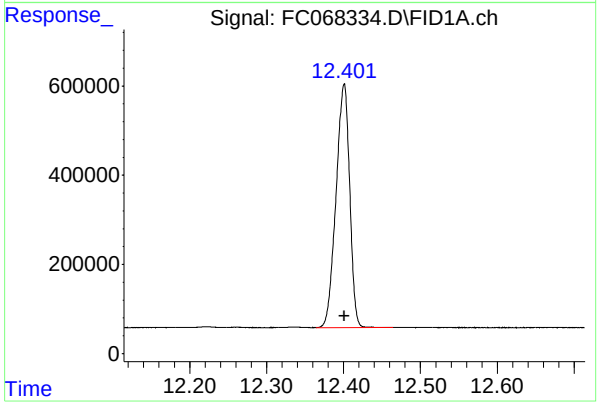

#8 n-Octadecane (C18)

R.T.: 11.093 min
Delta R.T.: -0.001 min
Response: 6605667
Conc: 48.30 ug/ml



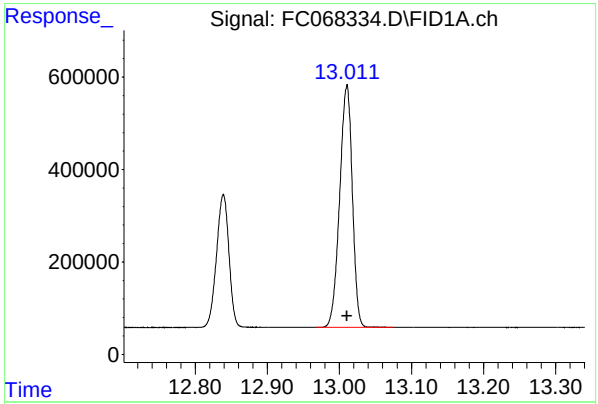

#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.400 min
Response: 0
Conc: N.D.




#10 n-Eicosane (C20)

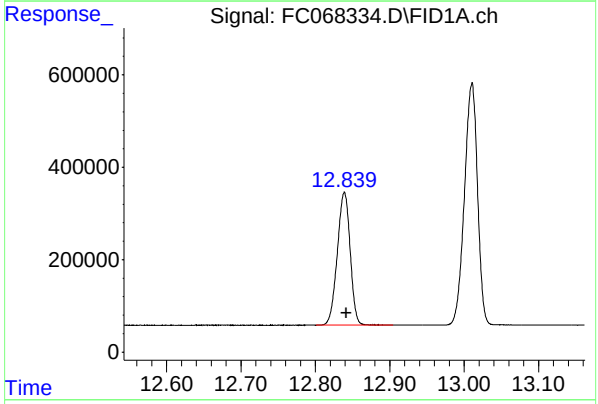
R.T.: 12.400 min
Delta R.T.: 0.000 min
Response: 6724652
Conc: 51.61 ug/ml




#11 n-Heneicosane (C21)

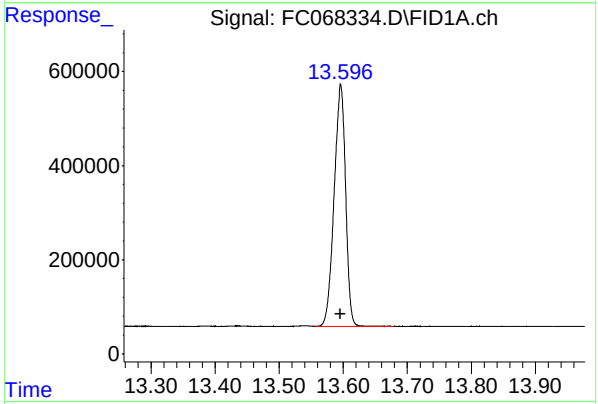
R.T.: 13.010 min
Delta R.T.: 0.000 min
Response: 6406807
Conc: 50.11 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
P001-CLAY-CF01-01MS



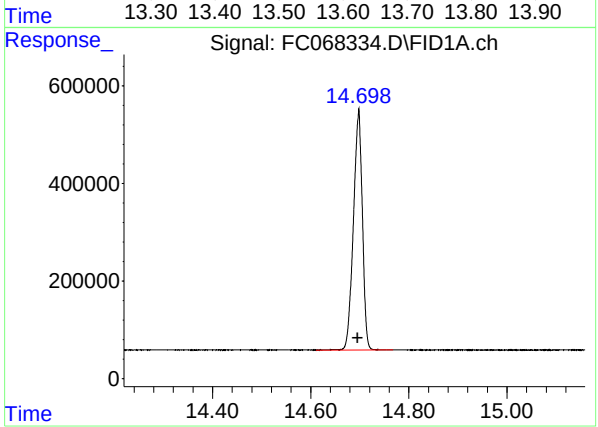

#12 1-chlorooctadecane (SURR)

R.T.: 12.839 min
Delta R.T.: -0.003 min
Response: 3447568
Conc: 30.65 ug/ml



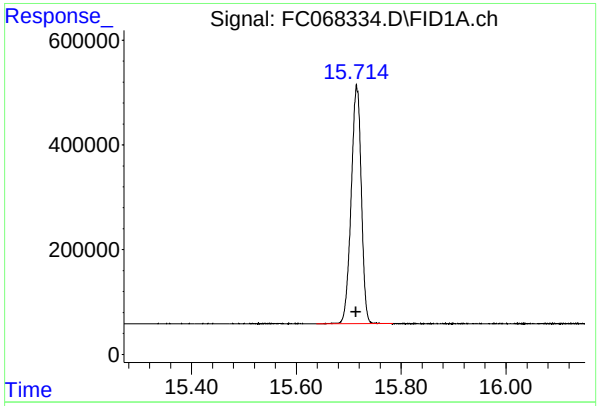

#13 n-Docosane (C22)

R.T.: 13.596 min
Delta R.T.: 0.000 min
Response: 6355786
Conc: 50.43 ug/ml




#14 n-Tetracosane (C24)

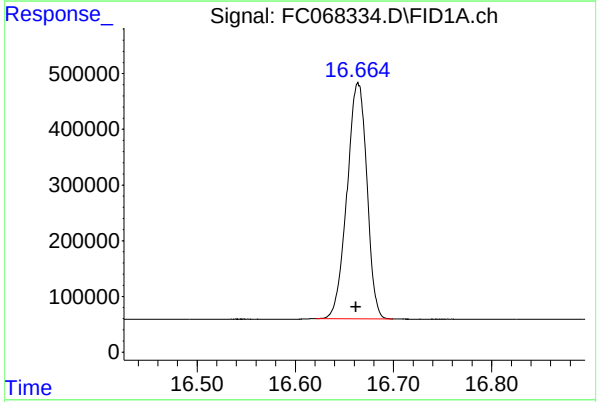
R.T.: 14.697 min
Delta R.T.: 0.001 min
Response: 6236779
Conc: 50.14 ug/ml




#15 n-Hexacosane (C26)

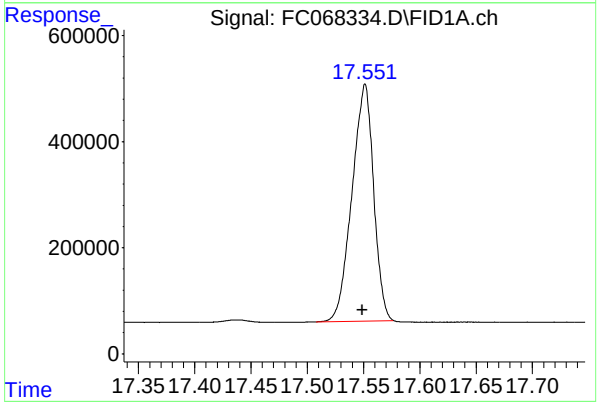
R.T.: 15.715 min
Delta R.T.: 0.001 min
Response: 6107881
Conc: 50.23 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
P001-CLAY-CF01-01MS



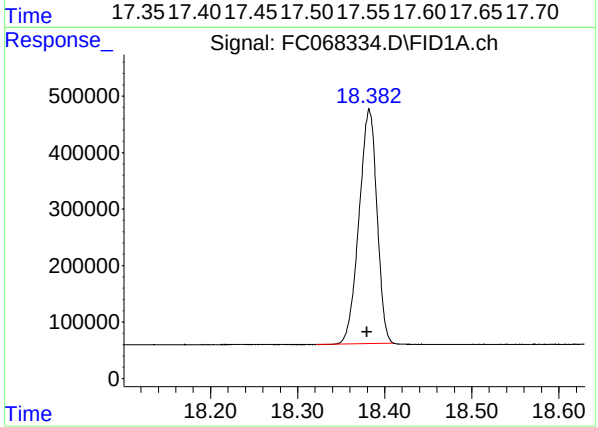

#16 n-Octacosane (C28)

R.T.: 16.664 min
Delta R.T.: 0.002 min
Response: 5953830
Conc: 50.13 ug/ml



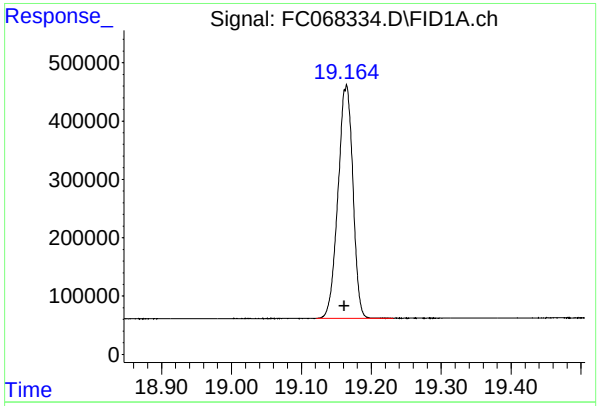

#17 n-Tricontane (C30)

R.T.: 17.551 min
Delta R.T.: 0.002 min
Response: 5974819
Conc: 49.64 ug/ml




#18 n-Dotriacontane (C32)

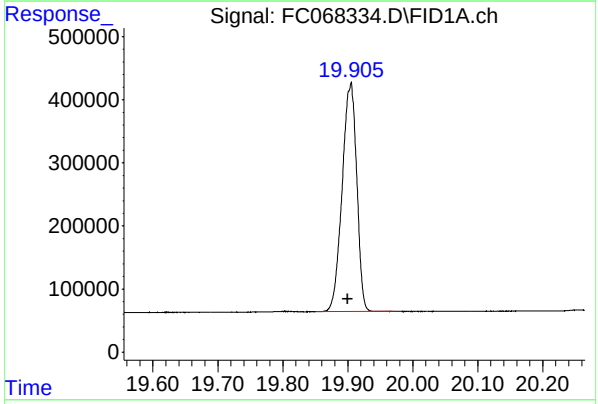
R.T.: 18.382 min
Delta R.T.: 0.002 min
Response: 5932634
Conc: 51.11 ug/ml




#19 n-Tetratriacontane (C34)

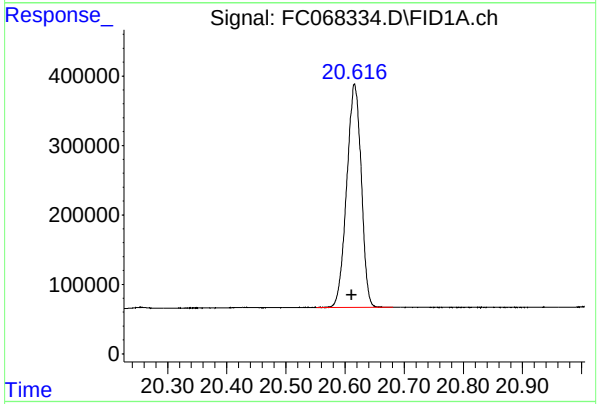
R.T.: 19.164 min
Delta R.T.: 0.003 min
Response: 5900054
Conc: 54.60 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
P001-CLAY-CF01-01MS



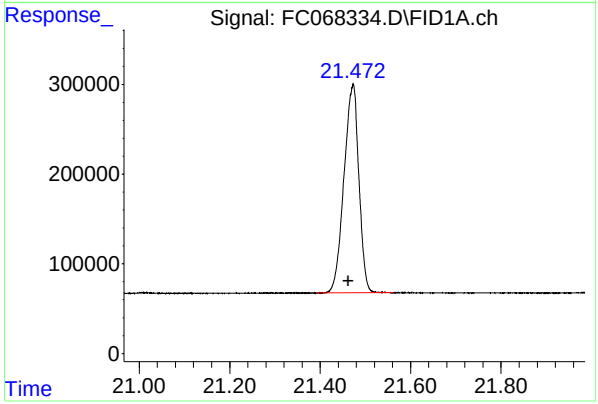

#20 n-Hexatriacontane (C36)

R.T.: 19.904 min
Delta R.T.: 0.004 min
Response: 5653625
Conc: 58.79 ug/ml




#21 n-Octatriacontane (C38)

R.T.: 20.616 min
Delta R.T.: 0.005 min
Response: 5491943
Conc: 61.09 ug/ml




#22 n-Tetracontane (C40)

R.T.: 21.472 min
Delta R.T.: 0.010 min
Response: 5316432
Conc: 61.45 ug/ml

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022825AL\
Data File : FC068334.D
Signal(s) : FID1A.ch
Acq On : 28 Feb 2025 18:56
Sample : Q1421-02
Misc :
ALS Vial : 21 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Title : GC Extractables

Signal : FID1A.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 2.373 | 2.304 | 2.402 | BV | 2444 | 20177 | 0.30% | 0.018% |
| 2 | 2.430 | 2.402 | 2.454 | PV | 7767 | 67001 | 0.99% | 0.059% |
| 3 | 2.475 | 2.454 | 2.535 | VV | 9285 | 76863 | 1.14% | 0.067% |
| 4 | 2.556 | 2.535 | 2.578 | VV | 360 | 5078 | 0.08% | 0.004% |
| 5 | 2.588 | 2.578 | 2.626 | VV | 234 | 3484 | 0.05% | 0.003% |
| 6 | 2.654 | 2.626 | 2.721 | PV | 5970 | 55320 | 0.82% | 0.048% |
| 7 | 2.743 | 2.721 | 2.771 | VV | 3718 | 52504 | 0.78% | 0.046% |
| 8 | 2.786 | 2.771 | 2.820 | VV | 1524 | 17198 | 0.25% | 0.015% |
| 9 | 2.839 | 2.820 | 2.900 | VV | 1638 | 20171 | 0.30% | 0.018% |
| 10 | 2.917 | 2.900 | 2.943 | VV | 340 | 4970 | 0.07% | 0.004% |
| 11 | 2.961 | 2.943 | 2.993 | VV | 1652 | 15512 | 0.23% | 0.014% |
| 12 | 3.031 | 2.993 | 3.044 | VV | 298 | 5350 | 0.08% | 0.005% |
| 13 | 3.054 | 3.044 | 3.071 | VV | 147 | 1723 | 0.03% | 0.002% |
| 14 | 3.095 | 3.071 | 3.122 | VV | 221 | 3824 | 0.06% | 0.003% |
| 15 | 3.205 | 3.122 | 3.314 | VV | 476570 | 3974917 | 58.90% | 3.482% |
| 16 | 3.324 | 3.314 | 3.364 | VV | 381 | 7654 | 0.11% | 0.007% |
| 17 | 3.378 | 3.364 | 3.424 | VV | 331 | 9181 | 0.14% | 0.008% |
| 18 | 3.437 | 3.424 | 3.454 | VV | 241 | 3497 | 0.05% | 0.003% |
| 19 | 3.501 | 3.454 | 3.553 | VV | 659 | 21613 | 0.32% | 0.019% |
| 20 | 3.568 | 3.553 | 3.604 | VV | 260 | 4949 | 0.07% | 0.004% |
| 21 | 3.611 | 3.604 | 3.655 | VV | 176 | 3352 | 0.05% | 0.003% |
| 22 | 3.692 | 3.655 | 3.752 | VV | 421 | 11227 | 0.17% | 0.010% |
| 23 | 3.775 | 3.752 | 3.827 | VV | 350 | 7232 | 0.11% | 0.006% |
| 24 | 3.865 | 3.827 | 3.878 | VV | 588 | 8521 | 0.13% | 0.007% |
| 25 | 3.893 | 3.878 | 3.948 | VV | 975 | 13495 | 0.20% | 0.012% |
| 26 | 3.961 | 3.948 | 3.993 | VV | 284 | 4929 | 0.07% | 0.004% |
| 27 | 4.037 | 3.993 | 4.145 | VV | 944 | 27567 | 0.41% | 0.024% |
| 28 | 4.178 | 4.145 | 4.204 | VV | 296 | 6175 | 0.09% | 0.005% |
| 29 | 4.211 | 4.204 | 4.231 | VV | 230 | 2907 | 0.04% | 0.003% |
| 30 | 4.262 | 4.231 | 4.289 | VV | 524353 | 4734902 | 70.17% | 4.148% |
| 31 | 4.300 | 4.289 | 4.347 | VV | 3746 | 50768 | 0.75% | 0.044% |
| 32 | 4.364 | 4.347 | 4.390 | VV | 730 | 14752 | 0.22% | 0.013% |
| 33 | 4.428 | 4.390 | 4.448 | VV | 1240 | 21435 | 0.32% | 0.019% |
| 34 | 4.459 | 4.448 | 4.467 | VV | 425 | 4469 | 0.07% | 0.004% |
| 35 | 4.483 | 4.467 | 4.497 | VV | 955 | 11206 | 0.17% | 0.010% |
| 36 | 4.513 | 4.497 | 4.578 | VV | 1798 | 24455 | 0.36% | 0.021% |

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|---|---|---|---|---|---|---|---|---|
| 37 | 4.630 | 4.578 | 4.689 | VV | 247 | 12114 | 0.18% | 0.011% |
| 38 | 4.724 | 4.689 | 4.780 | VV | 273 | 7087 | 0.11% | 0.006% |
| 39 | 4.810 | 4.780 | 4.844 | VV | 250 | 4638 | 0.07% | 0.004% |
| 40 | 4.890 | 4.844 | 4.921 | VV | 3471 | 45773 | 0.68% | 0.040% |
| 41 | 4.946 | 4.921 | 4.962 | VV | 719 | 8954 | 0.13% | 0.008% |
| 42 | 4.973 | 4.962 | 5.018 | VV | 275 | 4329 | 0.06% | 0.004% |
| 43 | 5.081 | 5.018 | 5.101 | PV | 175 | 4452 | 0.07% | 0.004% |
| 44 | 5.115 | 5.101 | 5.153 | VV | 129 | 3282 | 0.05% | 0.003% |
| 45 | 5.163 | 5.153 | 5.223 | VV | 189 | 3688 | 0.05% | 0.003% |
| 46 | 5.258 | 5.223 | 5.269 | VV | 162 | 2711 | 0.04% | 0.002% |
| 47 | 5.292 | 5.269 | 5.312 | VV | 1773 | 19244 | 0.29% | 0.017% |
| 48 | 5.332 | 5.312 | 5.357 | VV | 1339 | 15550 | 0.23% | 0.014% |
| 49 | 5.387 | 5.357 | 5.434 | VV | 309 | 5489 | 0.08% | 0.005% |
| 50 | 5.469 | 5.434 | 5.495 | VV | 356 | 6323 | 0.09% | 0.006% |
| 51 | 5.508 | 5.495 | 5.529 | VV | 125 | 1637 | 0.02% | 0.001% |
| 52 | 5.539 | 5.529 | 5.553 | VV | 148 | 1273 | 0.02% | 0.001% |
| 53 | 5.582 | 5.553 | 5.613 | VV | 280 | 5783 | 0.09% | 0.005% |
| 54 | 5.640 | 5.613 | 5.684 | VV | 173 | 4197 | 0.06% | 0.004% |
| 55 | 5.692 | 5.684 | 5.724 | VV | 99 | 1301 | 0.02% | 0.001% |
| 56 | 5.742 | 5.724 | 5.763 | PV | 204 | 2404 | 0.04% | 0.002% |
| 57 | 5.788 | 5.763 | 5.813 | VV | 186 | 3529 | 0.05% | 0.003% |
| 58 | 5.838 | 5.813 | 5.869 | VV | 890 | 16772 | 0.25% | 0.015% |
| 59 | 5.886 | 5.869 | 5.908 | VV | 542 | 8475 | 0.13% | 0.007% |
| 60 | 5.928 | 5.908 | 5.971 | VV | 1047 | 14951 | 0.22% | 0.013% |
| 61 | 5.991 | 5.971 | 6.029 | VV | 703 | 11596 | 0.17% | 0.010% |
| 62 | 6.064 | 6.029 | 6.086 | VV | 368 | 7588 | 0.11% | 0.007% |
| 63 | 6.115 | 6.086 | 6.132 | VV | 274 | 4178 | 0.06% | 0.004% |
| 64 | 6.164 | 6.132 | 6.228 | VV | 275 | 9391 | 0.14% | 0.008% |
| 65 | 6.270 | 6.228 | 6.334 | VV | 539912 | 5241953 | 77.68% | 4.592% |
| 66 | 6.351 | 6.334 | 6.374 | VV | 1068 | 17052 | 0.25% | 0.015% |
| 67 | 6.386 | 6.374 | 6.398 | VV | 676 | 7625 | 0.11% | 0.007% |
| 68 | 6.417 | 6.398 | 6.437 | VV | 1487 | 20059 | 0.30% | 0.018% |
| 69 | 6.450 | 6.437 | 6.471 | VV | 584 | 8181 | 0.12% | 0.007% |
| 70 | 6.489 | 6.471 | 6.538 | VV | 752 | 13429 | 0.20% | 0.012% |
| 71 | 6.552 | 6.538 | 6.568 | VV | 277 | 4003 | 0.06% | 0.004% |
| 72 | 6.587 | 6.568 | 6.611 | VV | 313 | 5879 | 0.09% | 0.005% |
| 73 | 6.622 | 6.611 | 6.641 | VV | 243 | 3682 | 0.05% | 0.003% |
| 74 | 6.655 | 6.641 | 6.684 | VV | 227 | 4481 | 0.07% | 0.004% |
| 75 | 6.708 | 6.684 | 6.736 | VV | 664 | 9075 | 0.13% | 0.008% |
| 76 | 6.762 | 6.736 | 6.796 | VV | 830 | 16423 | 0.24% | 0.014% |
| 77 | 6.824 | 6.796 | 6.854 | VV | 741 | 16164 | 0.24% | 0.014% |
| 78 | 6.887 | 6.854 | 6.914 | VV | 1061 | 19526 | 0.29% | 0.017% |
| 79 | 6.925 | 6.914 | 6.947 | VV | 306 | 4357 | 0.06% | 0.004% |
| 80 | 6.988 | 6.947 | 7.008 | VV | 329 | 7764 | 0.12% | 0.007% |
| 81 | 7.048 | 7.008 | 7.095 | VV | 2381 | 30341 | 0.45% | 0.027% |
| 82 | 7.108 | 7.095 | 7.138 | VV | 366 | 7191 | 0.11% | 0.006% |
| 83 | 7.155 | 7.138 | 7.167 | VV | 499 | 5849 | 0.09% | 0.005% |
| 84 | 7.188 | 7.167 | 7.213 | VV | 2579 | 30661 | 0.45% | 0.027% |
| 85 | 7.221 | 7.213 | 7.233 | VV | 260 | 2957 | 0.04% | 0.003% |
| 86 | 7.248 | 7.233 | 7.266 | VV | 418 | 6511 | 0.10% | 0.006% |
| 87 | 7.279 | 7.266 | 7.333 | VV | 619 | 10000 | 0.15% | 0.009% |
| 88 | 7.355 | 7.333 | 7.391 | VV | 242 | 6015 | 0.09% | 0.005% |
| 89 | 7.395 | 7.391 | 7.414 | VV | 190 | 1628 | 0.02% | 0.001% |

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|---|---|---|---|---|---|---|---|---|
| 90 | 7.448 | 7.414 | 7.478 | VV | 1037 | 13385 | 0.20% | 0.012% |
| 91 | 7.525 | 7.478 | 7.574 | VV | 321 | 11619 | 0.17% | 0.010% |
| 92 | 7.611 | 7.574 | 7.627 | VV | 353 | 8205 | 0.12% | 0.007% |
| 93 | 7.648 | 7.627 | 7.688 | VV | 402 | 10387 | 0.15% | 0.009% |
| 94 | 7.709 | 7.688 | 7.734 | VV | 486 | 7961 | 0.12% | 0.007% |
| 95 | 7.753 | 7.734 | 7.778 | VV | 1583 | 19335 | 0.29% | 0.017% |
| 96 | 7.809 | 7.778 | 7.834 | VV | 1594 | 21359 | 0.32% | 0.019% |
| 97 | 7.846 | 7.834 | 7.864 | VV | 354 | 4886 | 0.07% | 0.004% |
| 98 | 7.879 | 7.864 | 7.891 | VV | 423 | 4829 | 0.07% | 0.004% |
| 99 | 7.908 | 7.891 | 7.934 | VV | 361 | 6444 | 0.10% | 0.006% |
| 100 | 7.962 | 7.934 | 8.004 | VV | 856 | 13217 | 0.20% | 0.012% |
| 101 | 8.059 | 8.004 | 8.134 | VV | 554409 | 5855976 | 86.78% | 5.130% |
| 102 | 8.154 | 8.134 | 8.190 | VV | 891 | 22636 | 0.34% | 0.020% |
| 103 | 8.203 | 8.190 | 8.222 | VV | 574 | 8596 | 0.13% | 0.008% |
| 104 | 8.250 | 8.222 | 8.269 | VV | 624 | 10991 | 0.16% | 0.010% |
| 105 | 8.287 | 8.269 | 8.328 | VV | 613 | 10178 | 0.15% | 0.009% |
| 106 | 8.358 | 8.328 | 8.438 | VV | 3538 | 79437 | 1.18% | 0.070% |
| 107 | 8.449 | 8.438 | 8.464 | VV | 483 | 7244 | 0.11% | 0.006% |
| 108 | 8.474 | 8.464 | 8.488 | VV | 607 | 6830 | 0.10% | 0.006% |
| 109 | 8.516 | 8.488 | 8.531 | VV | 612 | 13038 | 0.19% | 0.011% |
| 110 | 8.544 | 8.531 | 8.558 | VV | 691 | 8906 | 0.13% | 0.008% |
| 111 | 8.592 | 8.558 | 8.631 | VV | 1119 | 27569 | 0.41% | 0.024% |
| 112 | 8.654 | 8.631 | 8.687 | VV | 452 | 9010 | 0.13% | 0.008% |
| 113 | 8.707 | 8.687 | 8.725 | VV | 426 | 6259 | 0.09% | 0.005% |
| 114 | 8.745 | 8.725 | 8.753 | VV | 313 | 3931 | 0.06% | 0.003% |
| 115 | 8.776 | 8.753 | 8.796 | VV | 1501 | 20657 | 0.31% | 0.018% |
| 116 | 8.812 | 8.796 | 8.825 | VV | 888 | 11876 | 0.18% | 0.010% |
| 117 | 8.833 | 8.825 | 8.854 | VV | 679 | 10088 | 0.15% | 0.009% |
| 118 | 8.887 | 8.854 | 8.943 | VV | 2096 | 46575 | 0.69% | 0.041% |
| 119 | 8.962 | 8.943 | 8.989 | VV | 596 | 8314 | 0.12% | 0.007% |
| 120 | 9.011 | 8.989 | 9.037 | PV | 415 | 5547 | 0.08% | 0.005% |
| 121 | 9.131 | 9.037 | 9.145 | VV | 387 | 13254 | 0.20% | 0.012% |
| 122 | 9.174 | 9.145 | 9.221 | VV | 781 | 15428 | 0.23% | 0.014% |
| 123 | 9.245 | 9.221 | 9.273 | VV | 1372 | 22829 | 0.34% | 0.020% |
| 124 | 9.294 | 9.273 | 9.322 | VV | 889 | 12552 | 0.19% | 0.011% |
| 125 | 9.334 | 9.322 | 9.354 | VV | 263 | 3002 | 0.04% | 0.003% |
| 126 | 9.388 | 9.354 | 9.408 | VV | 903 | 13561 | 0.20% | 0.012% |
| 127 | 9.432 | 9.408 | 9.473 | VV | 3048 | 36278 | 0.54% | 0.032% |
| 128 | 9.490 | 9.473 | 9.508 | PV | 253 | 2752 | 0.04% | 0.002% |
| 129 | 9.522 | 9.508 | 9.535 | VV | 181 | 2184 | 0.03% | 0.002% |
| 130 | 9.576 | 9.535 | 9.609 | VV | 648 | 15373 | 0.23% | 0.013% |
| 131 | 9.655 | 9.609 | 9.766 | VV | 558718 | 6394144 | 94.75% | 5.602% |
| 132 | 9.773 | 9.766 | 9.864 | VV | 389 | 14407 | 0.21% | 0.013% |
| 133 | 9.931 | 9.864 | 9.948 | VV | 308 | 7356 | 0.11% | 0.006% |
| 134 | 9.969 | 9.948 | 9.990 | VV | 302 | 6115 | 0.09% | 0.005% |
| 135 | 10.045 | 9.990 | 10.064 | VV | 472 | 12862 | 0.19% | 0.011% |
| 136 | 10.081 | 10.064 | 10.102 | VV | 363 | 6588 | 0.10% | 0.006% |
| 137 | 10.129 | 10.102 | 10.151 | VV | 338 | 6987 | 0.10% | 0.006% |
| 138 | 10.159 | 10.151 | 10.180 | VV | 290 | 3147 | 0.05% | 0.003% |
| 139 | 10.191 | 10.180 | 10.197 | VV | 128 | 1121 | 0.02% | 0.001% |
| 140 | 10.205 | 10.197 | 10.211 | VV | 152 | 1028 | 0.02% | 0.001% |
| 141 | 10.250 | 10.211 | 10.265 | VV | 389 | 7571 | 0.11% | 0.007% |

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|---|---|---|---|---|---|---|---|---|
| 142 | 10.275 | 10.265 | 10.303 | VV | 376 | 6423 | 0.10% | 0.006% |
| 143 | 10.322 | 10.303 | 10.348 | VV | 577 | 10901 | 0.16% | 0.010% |
| 144 | 10.391 | 10.348 | 10.423 | VV | 743 | 18152 | 0.27% | 0.016% |
| 145 | 10.443 | 10.423 | 10.458 | VV | 366 | 5798 | 0.09% | 0.005% |
| 146 | 10.476 | 10.458 | 10.488 | VV | 430 | 6016 | 0.09% | 0.005% |
| 147 | 10.515 | 10.488 | 10.548 | VV | 1041 | 19254 | 0.29% | 0.017% |
| 148 | 10.604 | 10.584 | 10.658 | VV | 273 | 7646 | 0.11% | 0.007% |
| 149 | 10.675 | 10.658 | 10.683 | VV | 257 | 2854 | 0.04% | 0.003% |
| 150 | 10.714 | 10.683 | 10.741 | VV | 436 | 9433 | 0.14% | 0.008% |
| 151 | 10.761 | 10.741 | 10.794 | VV | 411 | 9576 | 0.14% | 0.008% |
| 152 | 10.811 | 10.794 | 10.831 | VV | 557 | 8515 | 0.13% | 0.007% |
| 153 | 10.844 | 10.831 | 10.862 | VV | 342 | 3978 | 0.06% | 0.003% |
| 154 | 10.894 | 10.862 | 10.940 | VV | 1481 | 20511 | 0.30% | 0.018% |
| 155 | 10.947 | 10.940 | 10.978 | VV | 104 | 1539 | 0.02% | 0.001% |
| 156 | 11.021 | 10.978 | 11.054 | VV | 1735 | 24417 | 0.36% | 0.021% |
| 157 | 11.093 | 11.054 | 11.168 | VV | 565923 | 6625320 | 98.18% | 5.804% |
| 158 | 11.182 | 11.168 | 11.231 | VV | 720 | 14671 | 0.22% | 0.013% |
| 159 | 11.241 | 11.231 | 11.261 | VV | 192 | 2557 | 0.04% | 0.002% |
| 160 | 11.273 | 11.261 | 11.288 | VV | 173 | 1837 | 0.03% | 0.002% |
| 161 | 11.318 | 11.288 | 11.348 | VV | 209 | 5178 | 0.08% | 0.005% |
| 162 | 11.354 | 11.348 | 11.368 | VV | 85 | 1004 | 0.01% | 0.001% |
| 163 | 11.398 | 11.368 | 11.435 | VV | 297 | 9104 | 0.13% | 0.008% |
| 164 | 11.450 | 11.435 | 11.460 | VV | 333 | 3793 | 0.06% | 0.003% |
| 165 | 11.477 | 11.460 | 11.519 | VV | 415 | 10036 | 0.15% | 0.009% |
| 166 | 11.556 | 11.519 | 11.602 | VV | 414 | 11078 | 0.16% | 0.010% |
| 167 | 11.609 | 11.602 | 11.618 | VV | 109 | 953 | 0.01% | 0.001% |
| 168 | 11.752 | 11.618 | 11.781 | VV | 588 | 31644 | 0.47% | 0.028% |
| 169 | 11.800 | 11.781 | 11.831 | VV | 366 | 7504 | 0.11% | 0.007% |
| 170 | 11.848 | 11.831 | 11.864 | VV | 282 | 4549 | 0.07% | 0.004% |
| 171 | 11.893 | 11.864 | 11.938 | VV | 424 | 11070 | 0.16% | 0.010% |
| 172 | 11.973 | 11.938 | 12.009 | VV | 753 | 21641 | 0.32% | 0.019% |
| 173 | 12.030 | 12.009 | 12.052 | VV | 621 | 10594 | 0.16% | 0.009% |
| 174 | 12.070 | 12.052 | 12.085 | VV | 610 | 9008 | 0.13% | 0.008% |
| 175 | 12.093 | 12.085 | 12.132 | VV | 338 | 6661 | 0.10% | 0.006% |
| 176 | 12.222 | 12.132 | 12.245 | VV | 1915 | 41265 | 0.61% | 0.036% |
| 177 | 12.260 | 12.245 | 12.302 | VV | 961 | 14054 | 0.21% | 0.012% |
| 178 | 12.336 | 12.302 | 12.359 | VV | 1377 | 18443 | 0.27% | 0.016% |
| 179 | 12.400 | 12.359 | 12.498 | VV | 550415 | 6748141 | 100.00% | 5.912% |
| 180 | 12.508 | 12.498 | 12.628 | VV | 306 | 11917 | 0.18% | 0.010% |
| 181 | 12.653 | 12.628 | 12.664 | PV | 184 | 2976 | 0.04% | 0.003% |
| 182 | 12.672 | 12.664 | 12.738 | VV | 191 | 5818 | 0.09% | 0.005% |
| 183 | 12.839 | 12.738 | 12.931 | VV | 286432 | 3481931 | 51.60% | 3.050% |
| 184 | 12.953 | 12.931 | 12.969 | VV | 428 | 8655 | 0.13% | 0.008% |
| 185 | 13.010 | 12.969 | 13.178 | VV | 526070 | 6448726 | 95.56% | 5.649% |
| 186 | 13.208 | 13.178 | 13.240 | VV | 376 | 10702 | 0.16% | 0.009% |
| 187 | 13.283 | 13.240 | 13.324 | VV | 471 | 15893 | 0.24% | 0.014% |
| 188 | 13.347 | 13.324 | 13.364 | VV | 296 | 5459 | 0.08% | 0.005% |
| 189 | 13.384 | 13.364 | 13.407 | VV | 696 | 11042 | 0.16% | 0.010% |
| 190 | 13.435 | 13.407 | 13.484 | VV | 1046 | 21956 | 0.33% | 0.019% |
| 191 | 13.498 | 13.484 | 13.513 | VV | 276 | 3937 | 0.06% | 0.003% |
| 192 | 13.539 | 13.513 | 13.556 | VV | 1419 | 19411 | 0.29% | 0.017% |
| 193 | 13.596 | 13.556 | 13.688 | VV | 513366 | 6381544 | 94.57% | 5.590% |
| 194 | 13.698 | 13.688 | 13.705 | VV | 257 | 2361 | 0.03% | 0.002% |

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|---|---|---|---|---|---|---|---|---|
| 195 | 13.715 | 13.705 | 13.750 | VV | 301 | 5196 | 0.08% | 0.005% |
| 196 | 13.769 | 13.750 | 13.791 | VV | 195 | 3768 | 0.06% | 0.003% |
| 197 | 13.806 | 13.791 | 13.833 | VV | 207 | 4647 | 0.07% | 0.004% |
| 198 | 13.847 | 13.833 | 13.861 | VV | 198 | 2753 | 0.04% | 0.002% |
| 199 | 13.865 | 13.861 | 13.908 | VV | 163 | 3524 | 0.05% | 0.003% |
| 200 | 13.930 | 13.908 | 13.969 | VV | 201 | 4815 | 0.07% | 0.004% |
| 201 | 13.977 | 13.969 | 13.987 | VV | 121 | 1041 | 0.02% | 0.001% |
| 202 | 14.030 | 13.987 | 14.108 | VV | 938 | 23520 | 0.35% | 0.021% |
| 203 | 14.119 | 14.108 | 14.130 | VV | 191 | 1931 | 0.03% | 0.002% |
| 204 | 14.153 | 14.130 | 14.198 | VV | 516 | 10405 | 0.15% | 0.009% |
| 205 | 14.297 | 14.198 | 14.368 | VV | 343 | 24148 | 0.36% | 0.021% |
| 206 | 14.397 | 14.368 | 14.424 | VV | 347 | 8382 | 0.12% | 0.007% |
| 207 | 14.462 | 14.424 | 14.489 | VV | 351 | 9124 | 0.14% | 0.008% |
| 208 | 14.504 | 14.489 | 14.521 | VV | 310 | 4445 | 0.07% | 0.004% |
| 209 | 14.545 | 14.521 | 14.574 | VV | 400 | 7327 | 0.11% | 0.006% |
| 210 | 14.594 | 14.574 | 14.611 | VV | 242 | 4170 | 0.06% | 0.004% |
| 211 | 14.648 | 14.611 | 14.657 | VV | 1188 | 15313 | 0.23% | 0.013% |
| 212 | 14.697 | 14.657 | 14.824 | VV | 489965 | 6246308 | 92.56% | 5.472% |
| 213 | 14.833 | 14.824 | 14.849 | VV | 140 | 1753 | 0.03% | 0.002% |
| 214 | 14.862 | 14.849 | 14.922 | VV | 195 | 6292 | 0.09% | 0.006% |
| 215 | 14.930 | 14.922 | 14.994 | VV | 168 | 4066 | 0.06% | 0.004% |
| 216 | 15.001 | 14.994 | 15.014 | VV | 75 | 973 | 0.01% | 0.001% |
| 217 | 15.024 | 15.014 | 15.065 | VV | 107 | 2267 | 0.03% | 0.002% |
| 218 | 15.075 | 15.065 | 15.090 | VV | 130 | 1445 | 0.02% | 0.001% |
| 219 | 15.122 | 15.090 | 15.136 | VV | 168 | 3329 | 0.05% | 0.003% |
| 220 | 15.212 | 15.136 | 15.294 | VV | 1180 | 24519 | 0.36% | 0.021% |
| 221 | 15.354 | 15.294 | 15.378 | PV | 196 | 5498 | 0.08% | 0.005% |
| 222 | 15.392 | 15.378 | 15.402 | VV | 164 | 2044 | 0.03% | 0.002% |
| 223 | 15.411 | 15.402 | 15.468 | VV | 199 | 5159 | 0.08% | 0.005% |
| 224 | 15.567 | 15.468 | 15.594 | VV | 304 | 13518 | 0.20% | 0.012% |
| 225 | 15.602 | 15.594 | 15.638 | VV | 178 | 2874 | 0.04% | 0.003% |
| 226 | 15.715 | 15.638 | 15.874 | VV | 453709 | 6127369 | 90.80% | 5.368% |
| 227 | 15.896 | 15.874 | 15.998 | VV | 161 | 4903 | 0.07% | 0.004% |
| 228 | 16.034 | 15.998 | 16.058 | VV | 154 | 2482 | 0.04% | 0.002% |
| 229 | 16.065 | 16.058 | 16.082 | VV | 94 | 878 | 0.01% | 0.001% |
| 230 | 16.105 | 16.082 | 16.141 | PV | 121 | 2159 | 0.03% | 0.002% |
| 231 | 16.159 | 16.141 | 16.168 | VV | 188 | 1698 | 0.03% | 0.001% |
| 232 | 16.194 | 16.168 | 16.254 | VV | 1679 | 25892 | 0.38% | 0.023% |
| 233 | 16.271 | 16.254 | 16.306 | VV | 270 | 3955 | 0.06% | 0.003% |
| 234 | 16.317 | 16.306 | 16.331 | VV | 96 | 762 | 0.01% | 0.001% |
| 235 | 16.358 | 16.331 | 16.374 | VV | 229 | 3509 | 0.05% | 0.003% |
| 236 | 16.390 | 16.374 | 16.434 | VV | 143 | 5100 | 0.08% | 0.004% |
| 237 | 16.442 | 16.434 | 16.466 | VV | 174 | 2263 | 0.03% | 0.002% |
| 238 | 16.501 | 16.466 | 16.518 | VV | 188 | 3685 | 0.05% | 0.003% |
| 239 | 16.545 | 16.518 | 16.598 | VV | 425 | 13351 | 0.20% | 0.012% |
| 240 | 16.664 | 16.598 | 16.734 | VV | 424710 | 6019424 | 89.20% | 5.273% |
| 241 | 16.745 | 16.734 | 16.788 | VV | 326 | 7647 | 0.11% | 0.007% |
| 242 | 16.795 | 16.788 | 16.852 | VV | 202 | 4824 | 0.07% | 0.004% |
| 243 | 16.867 | 16.852 | 16.916 | VV | 103 | 2253 | 0.03% | 0.002% |
| 244 | 16.922 | 16.916 | 16.927 | VV | 71 | 350 | 0.01% | 0.000% |
| 245 | 16.955 | 16.927 | 16.978 | VV | 290 | 4629 | 0.07% | 0.004% |
| 246 | 17.010 | 16.978 | 17.028 | VV | 202 | 3878 | 0.06% | 0.003% |

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|---|---|---|---|---|---|---|---|---|
| 247 | 17.041 | 17.028 | 17.068 | VV | 173 | 2364 | 0.04% | 0.002% |
| 248 | 17.111 | 17.068 | 17.174 | VV | 2404 | 39025 | 0.58% | 0.034% |
| 249 | 17.336 | 17.174 | 17.368 | PV | 275 | 20619 | 0.31% | 0.018% |
| 250 | 17.387 | 17.368 | 17.401 | VV | 272 | 3524 | 0.05% | 0.003% |
| 251 | 17.437 | 17.401 | 17.475 | VV | 4691 | 71943 | 1.07% | 0.063% |
| 252 | 17.551 | 17.475 | 17.619 | VV | 449116 | 6077453 | 90.06% | 5.324% |
| 253 | 17.641 | 17.619 | 17.662 | VV | 447 | 9996 | 0.15% | 0.009% |
| 254 | 17.672 | 17.662 | 17.714 | VV | 282 | 6932 | 0.10% | 0.006% |
| 255 | 17.731 | 17.714 | 17.774 | VV | 226 | 3697 | 0.05% | 0.003% |
| 256 | 17.826 | 17.774 | 17.890 | PV | 320 | 10337 | 0.15% | 0.009% |
| 257 | 17.898 | 17.890 | 17.906 | VV | 120 | 576 | 0.01% | 0.001% |
| 258 | 17.968 | 17.906 | 18.008 | PV | 3186 | 48425 | 0.72% | 0.042% |
| 259 | 18.055 | 18.008 | 18.076 | VV | 133 | 3080 | 0.05% | 0.003% |
| 260 | 18.234 | 18.076 | 18.250 | VV | 270 | 7745 | 0.11% | 0.007% |
| 261 | 18.266 | 18.250 | 18.313 | VV | 261 | 4615 | 0.07% | 0.004% |
| 262 | 18.382 | 18.313 | 18.454 | PV | 413964 | 6001712 | 88.94% | 5.258% |
| 263 | 18.507 | 18.454 | 18.521 | VV | 208 | 5479 | 0.08% | 0.005% |
| 264 | 18.537 | 18.521 | 18.564 | VV | 182 | 3281 | 0.05% | 0.003% |
| 265 | 18.592 | 18.564 | 18.604 | VV | 185 | 2248 | 0.03% | 0.002% |
| 266 | 18.633 | 18.604 | 18.654 | VV | 166 | 3189 | 0.05% | 0.003% |
| 267 | 18.685 | 18.654 | 18.696 | VV | 99 | 1632 | 0.02% | 0.001% |
| 268 | 18.775 | 18.696 | 18.808 | PV | 2910 | 42936 | 0.64% | 0.038% |
| 269 | 18.834 | 18.808 | 18.874 | VV | 109 | 2129 | 0.03% | 0.002% |
| 270 | 18.961 | 18.874 | 18.988 | PV | 189 | 6398 | 0.09% | 0.006% |
| 271 | 19.089 | 18.988 | 19.101 | VV | 250 | 10181 | 0.15% | 0.009% |
| 272 | 19.164 | 19.101 | 19.253 | VV | 397589 | 5928806 | 87.86% | 5.194% |
| 273 | 19.268 | 19.253 | 19.291 | VV | 393 | 7503 | 0.11% | 0.007% |
| 274 | 19.321 | 19.291 | 19.364 | VV | 466 | 15140 | 0.22% | 0.013% |
| 275 | 19.471 | 19.364 | 19.497 | VV | 555 | 31946 | 0.47% | 0.028% |
| 276 | 19.533 | 19.497 | 19.581 | VV | 1963 | 43177 | 0.64% | 0.038% |
| 277 | 19.803 | 19.581 | 19.834 | VV | 1730 | 120045 | 1.78% | 0.105% |
| 278 | 19.904 | 19.834 | 20.010 | VV | 361310 | 5791003 | 85.82% | 5.073% |
| 279 | 20.021 | 20.010 | 20.031 | VV | 1425 | 16738 | 0.25% | 0.015% |
| 280 | 20.255 | 20.031 | 20.298 | VV | 3227 | 276042 | 4.09% | 0.242% |
| 281 | 20.431 | 20.298 | 20.461 | VV | 2745 | 223985 | 3.32% | 0.196% |
| 282 | 20.475 | 20.461 | 20.491 | VV | 2507 | 44379 | 0.66% | 0.039% |
| 283 | 20.616 | 20.491 | 20.758 | VV | 321083 | 5896031 | 87.37% | 5.165% |
| 284 | 20.774 | 20.758 | 20.812 | VV | 2369 | 74617 | 1.11% | 0.065% |
| 285 | 20.819 | 20.812 | 20.828 | VV | 2218 | 20610 | 0.31% | 0.018% |
| 286 | 20.937 | 20.828 | 20.968 | VV | 2225 | 179546 | 2.66% | 0.157% |
| 287 | 21.009 | 20.968 | 21.049 | VV | 2645 | 108714 | 1.61% | 0.095% |
| 288 | 21.056 | 21.049 | 21.072 | VV | 1873 | 25754 | 0.38% | 0.023% |
| 289 | 21.285 | 21.072 | 21.298 | VV | 1863 | 243309 | 3.61% | 0.213% |
| 290 | 21.308 | 21.298 | 21.320 | VV | 1825 | 23251 | 0.34% | 0.020% |
| 291 | 21.352 | 21.320 | 21.361 | VV | 1736 | 41635 | 0.62% | 0.036% |
| 292 | 21.370 | 21.361 | 21.381 | VV | 1619 | 19867 | 0.29% | 0.017% |
| 293 | 21.388 | 21.381 | 21.395 | VV | 1626 | 13279 | 0.20% | 0.012% |
| 294 | 21.472 | 21.395 | 21.628 | VV | 232470 | 5539153 | 82.08% | 4.853% |
| 295 | 21.639 | 21.628 | 21.651 | VV | 1287 | 17310 | 0.26% | 0.015% |
| 296 | 21.670 | 21.651 | 21.690 | VV | 1291 | 28053 | 0.42% | 0.025% |
| 297 | 21.709 | 21.690 | 21.737 | VV | 1183 | 31107 | 0.46% | 0.027% |
| 298 | 21.772 | 21.737 | 21.878 | VV | 1053 | 77020 | 1.14% | 0.067% |
| 299 | 21.901 | 21.878 | 21.915 | VV | 749 | 15281 | 0.23% | 0.013% |

rteres

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 300 | 21.922 | 21.915 | 21.931 | VV | 654 | 5922 | 0.09% | 0.005% |
| 301 | 21.973 | 21.931 | 22.041 | VV | 779 | 39999 | 0.59% | 0.035% |
| 302 | 22.055 | 22.041 | 22.083 | VV | 455 | 8809 | 0.13% | 0.008% |
| 303 | 22.094 | 22.083 | 22.104 | VV | 307 | 3505 | 0.05% | 0.003% |
| 304 | 22.113 | 22.104 | 22.147 | VV | 325 | 5060 | 0.07% | 0.004% |
| 305 | 22.162 | 22.147 | 22.181 | VV | 91 | 1266 | 0.02% | 0.001% |

Sum of corrected areas: 114150106

Aliphatic EPH 021125.M Sat Mar 01 01:30:47 2025

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Weston Solutions, Inc. | Date Collected: | 02/24/25 |
| Project: | RFP 905 | Date Received: | 02/24/25 |
| Client Sample ID: | P001-CLAY-CF01-01MS | SDG No.: | Q1421 |
| Lab Sample ID: | Q1421-02 | Matrix: | Solid |
| Analytical Method: | NJEPH | % Solid: | 70.3 |
| Sample Wt/Vol: | 30.07 Units: g | Final Vol: | 2000 uL |
| Soil Aliquot Vol: | uL | Test: | EPH |
| Prep Method : | | | |

| File ID : | Dilution: | Prep Date : | Date Analyzed : | Prep Batch ID |
|---|---|---|---|---|
| FD049142.D | 1 | 02/27/25 | 02/28/25 | PB166923 |

| CAS Number | Parameter | | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | |
| Aromatic C10-C12 | Aromatic C10-C12 | | 9.80 | | 0.43 | 0.95 | mg/kg |
| Aromatic C12-C16 | Aromatic C12-C16 | | 17.2 | | 0.48 | 1.42 | mg/kg |
| Aromatic C16-C21 | Aromatic C16-C21 | | 35.7 | | 1.36 | 2.37 | mg/kg |
| Aromatic C21-C36 | Aromatic C21-C36 | | 57.2 | | 2.84 | 3.78 | mg/kg |
| **SURROGATES** | | | | | | | |
| 580-13-2 | 2-Bromonaphthalene (SURR) | | 59.0 | | 40 - 140 | 118% | SPK: 50 |
| 321-60-8 | 2-Flurobiphenyl (SURR) | | 62.2 | | 40 - 140 | 124% | SPK: 50 |
| 84-15-1 | ortho-Terphenyl (SURR) | | 33.3 | | 40 - 140 | 67% | SPK: 50 |

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

# Quantitation Report For Aromatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | Q1421-02 | Acq On: | 28 Feb 2025 18:56 |
| Client Sample ID: | P001-CLAY-CF01-01MS | Operator: | YP/AJ |
| Data file: | FD049142.D | Misc: | |
| Instrument: | FID_D | ALS Vial: | 71 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aromatic C10-C12 | 4.076 | 5.794 | 16467986 | 103.559 | 200 | ug/ml |
| Aromatic C12-C16 | 5.795 | 8.396 | 29311275 | 182.13 | 300 | ug/ml |
| Aromatic C16-C21 | 8.397 | 12.661 | 57903456 | 377.567 | 500 | ug/ml |
| Aromatic C21-C36 | 12.662 | 18.073 | 86473438 | 604.224 | 800 | ug/ml |
| Aromatic EPH | 4.076 | 18.073 | 190156155 | 1270 | | ug/ml |
| 2-Bromonaphthalene (SURR) | 7.352 | 7.352 | 8441841 | 58.99 | | ug/ml |
| 2-Flurobiphenyl (SURR) | 8.203 | 8.203 | 5467908 | 62.2 | | ug/ml |
| ortho-Terphenyl (SURR) | 11.234 | 11.234 | 5392113 | 33.33 | | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022825AR\
Data File : FD049142.D
Signal(s) : FID2B.ch
Acq On : 28 Feb 2025 18:56
Operator : YP/AJ
Sample : Q1421-02
Misc :
ALS Vial : 71 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF01-01MS

Integration File: autoint1.e
Quant Time: Mar 01 02:21:11 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

| | Compound | R.T. | Response | Conc Units |
|---|---|---|---|---|
| | **System Monitoring Compounds** | | | |
| 4) | S 2-Bromonaphthalene (S... | 7.352 | 8441841 | 58.989 ug/ml |
| | Spiked Amount 50.000 | | Recovery = 117.98% | |
| 6) | S 2-Flurobiphenyl (SURR) | 8.203 | 5467908 | 62.198 ug/ml |
| | Spiked Amount 50.000 Range 0 - 131 | | Recovery = 124.40% | |
| 11) | S ortho-Terphenyl (SURR) | 11.234 | 5392113 | 33.331 ug/ml |
| | Spiked Amount 50.000 | | Recovery = 66.66% | |
| | **Target Compounds** | | | |
| 1) | T 1,2,3-Trimethylbenzen... | 4.176 | 7161833 | 44.971 ug/ml |
| 2) | T Naphthalene (C11.7) | 5.693 | 7880512 | 49.629 ug/ml |
| 3) | T 2-Methylnaphthalene (... | 6.739 | 7723846 | 49.609 ug/ml |
| 5) | T Acenaphthylene (C15.06) | 8.005 | 9044713 | 55.624 ug/ml |
| 7) | T Acenaphthene (C15.5) | 8.300 | 9678387 | 58.832 ug/ml |
| 8) | T Flouorene (C16.55) | 9.079 | 9845850 | 62.454 ug/ml |
| 9) | T Phenanthrene (C19.36) | 10.468 | 10158364 | 67.407 ug/ml |
| 10) | T Anthracene (C19.43) | 10.543 | 10371977 | 68.676 ug/ml |
| 12) | T Fluoranthene (C21.85) | 12.273 | 10603708 | 68.715 ug/ml |
| 13) | T Pyrene (C20.8) | 12.566 | 10302701 | 66.875 ug/ml |
| 14) | T Benzo[a]anthracene (C... | 14.438 | 9819357 | 74.734 ug/ml |
| 15) | T Chrysene (C27.41) | 14.480 | 9593320 | 59.333 ug/ml |
| 16) | T benzo[b]fluoranthene ... | 15.988 | 9767406 | 70.987 ug/ml |
| 17) | T Bnezo[k]fluoranthene ... | 16.023 | 9783217 | 61.942 ug/ml |
| 18) | T Benzo[a]pyrene (C31.34) | 16.364 | 9405556 | 69.293 ug/ml |
| 19) | T Indeno[1,2,3-cd]pyren... | 17.734 | 9336608 | 85.440 ug/ml |
| 20) | T Dibenz[a,h]anthracene... | 17.769 | 9340051 | 60.204 ug/ml |
| 21) | T Benzo[g,h,i]perylene ... | 17.986 | 9206882 | 63.517 ug/ml |

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

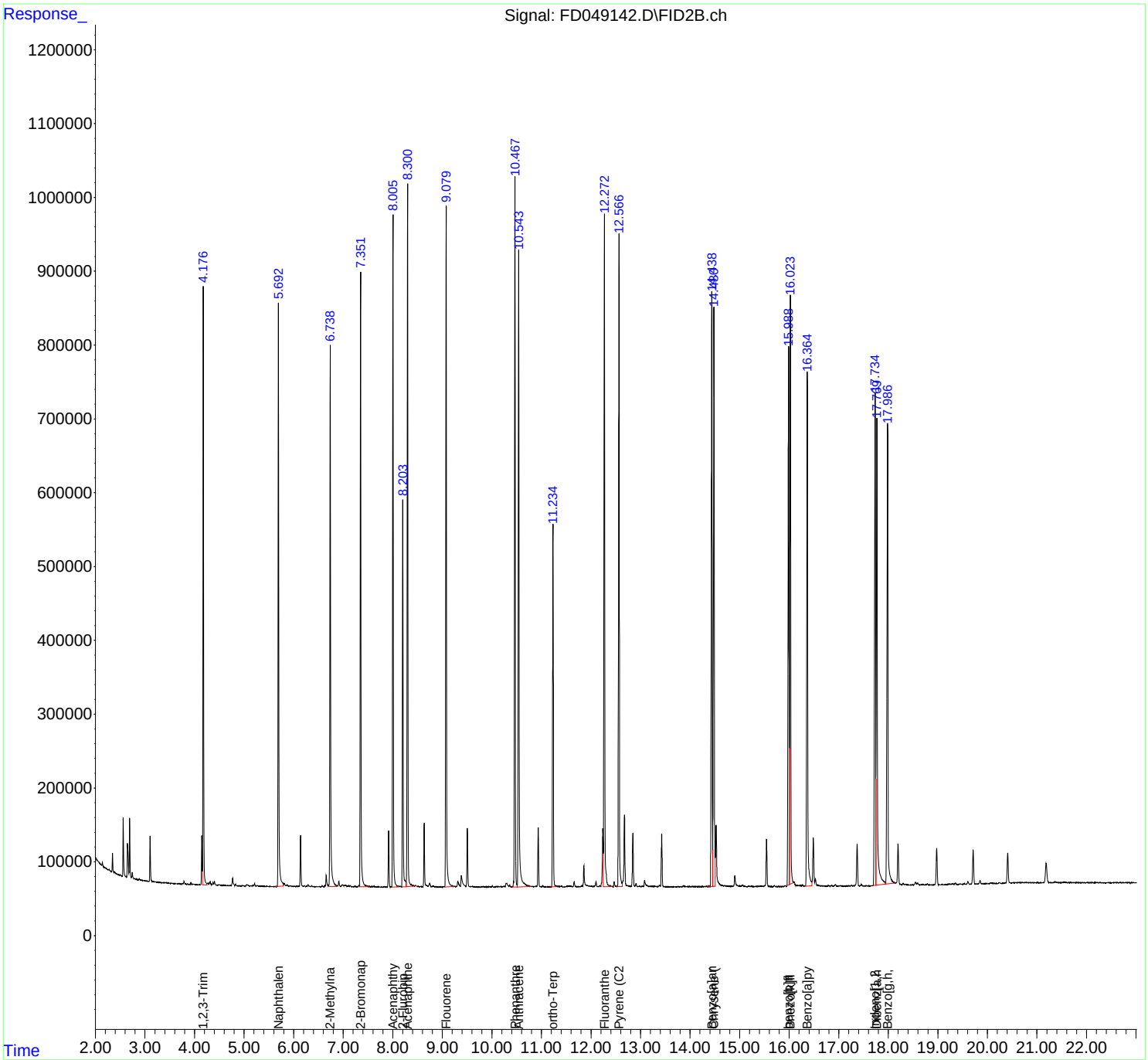
Quantitation Report (QT Reviewed)

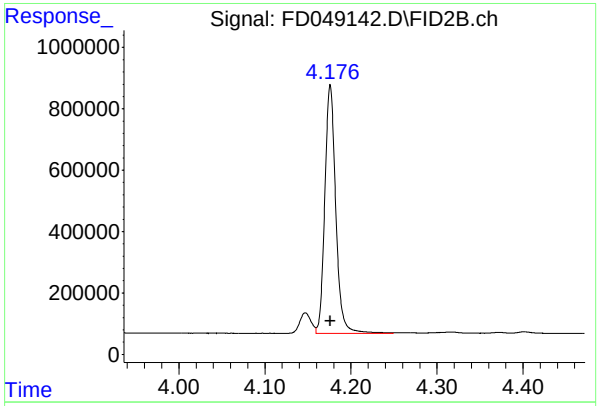
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022825AR\
Data File : FD049142.D
Signal(s) : FID2B.ch
Acq On : 28 Feb 2025 18:56
Operator : YP/AJ
Sample : Q1421-02
Misc :
ALS Vial : 71 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF01-01MS

Integration File: autoint1.e
Quant Time: Mar 01 02:21:11 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

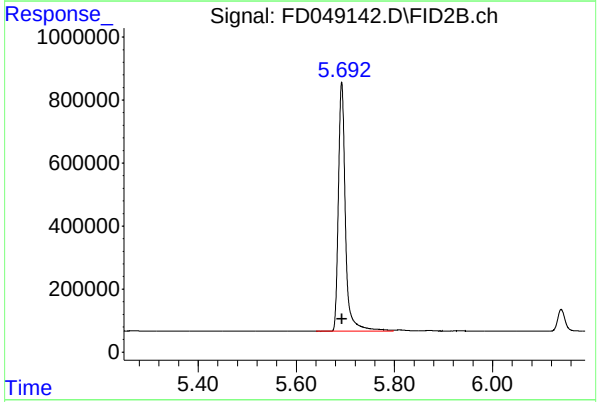





#1 1,2,3-Trimethylbenzene (C10.1)

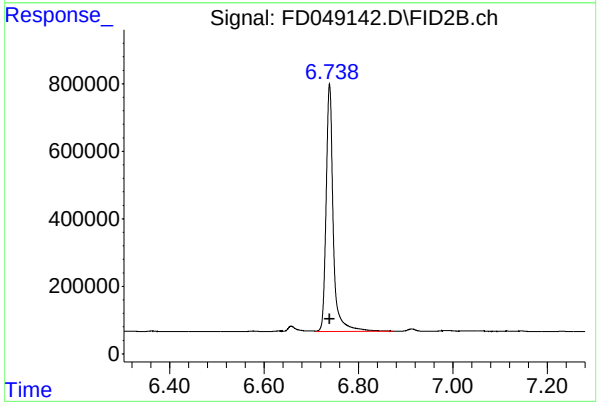
R.T.: 4.176 min
Delta R.T.: 0.000 min
Response: 7161833
Conc: 44.97 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF01-01MS



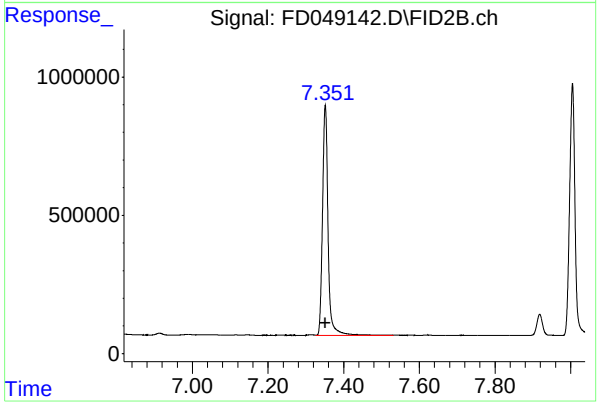

#2 Naphthalene (C11.7)

R.T.: 5.693 min
Delta R.T.: 0.000 min
Response: 7880512
Conc: 49.63 ug/ml



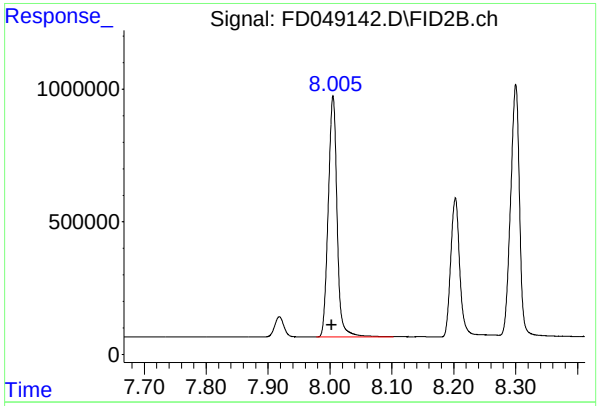

#3 2-Methylnaphthalene (C12.89)

R.T.: 6.739 min
Delta R.T.: 0.000 min
Response: 7723846
Conc: 49.61 ug/ml




#4 2-Bromonaphthalene (SURR)

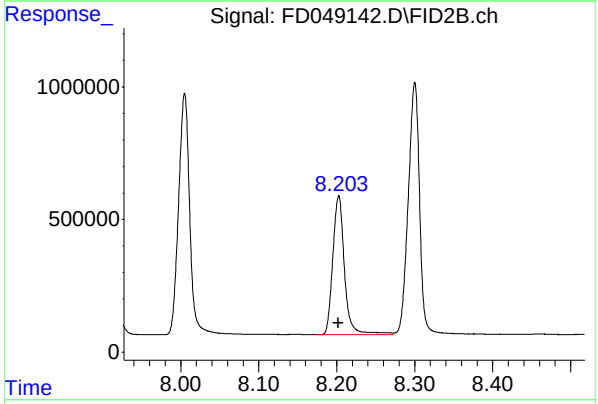
R.T.: 7.352 min
Delta R.T.: 0.000 min
Response: 8441841
Conc: 58.99 ug/ml




#5 Acenaphthylene (C15.06)

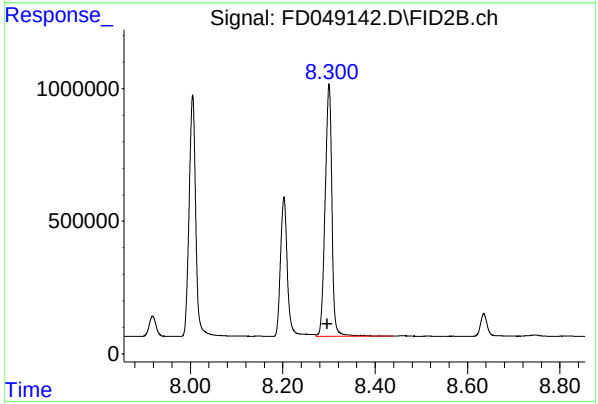
R.T.: 8.005 min
Delta R.T.: 0.002 min
Response: 9044713
Conc: 55.62 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF01-01MS



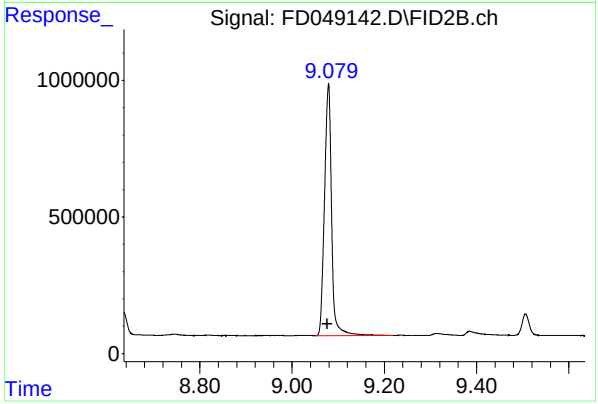

#6 2-Flurobiphenyl (SURR)

R.T.: 8.203 min
Delta R.T.: 0.000 min
Response: 5467908
Conc: 62.20 ug/ml



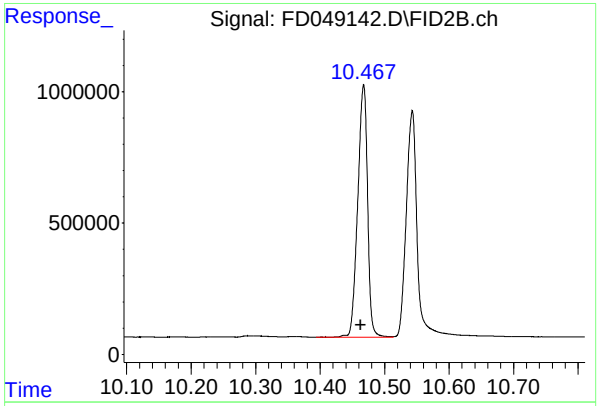

#7 Acenaphthene (C15.5)

R.T.: 8.300 min
Delta R.T.: 0.004 min
Response: 9678387
Conc: 58.83 ug/ml




#8 Flouorene (C16.55)

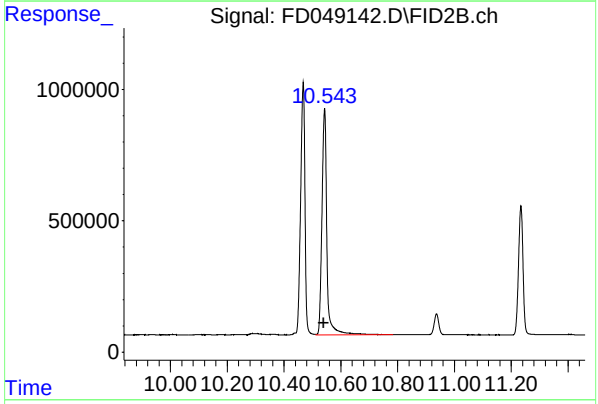
R.T.: 9.079 min
Delta R.T.: 0.003 min
Response: 9845850
Conc: 62.45 ug/ml




#9 Phenanthrene (C19.36)

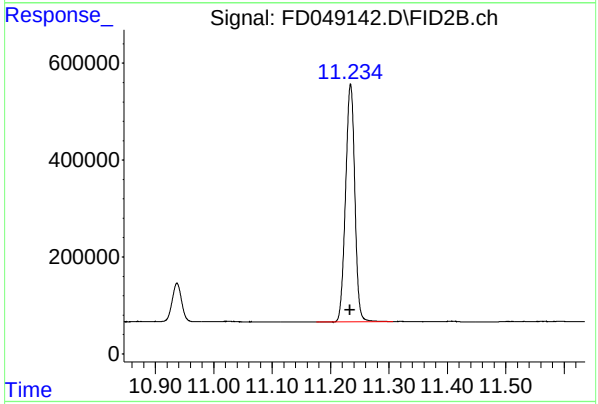
R.T.: 10.468 min
Delta R.T.: 0.005 min
Response: 10158364
Conc: 67.41 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF01-01MS



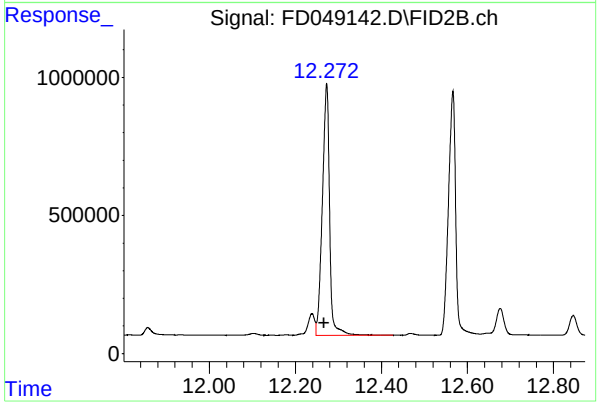

#10 Anthracene (C19.43)

R.T.: 10.543 min
Delta R.T.: 0.003 min
Response: 10371977
Conc: 68.68 ug/ml



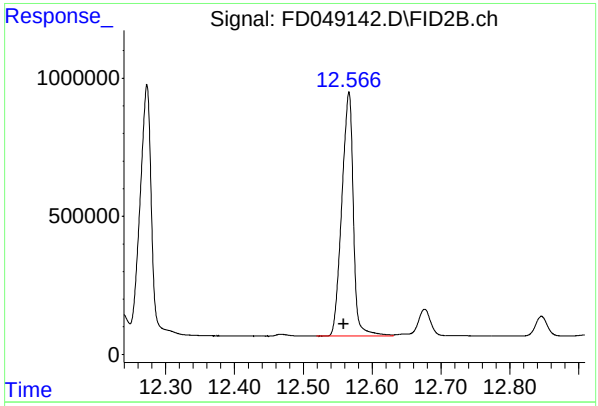

#11 ortho-Terphenyl (SURR)

R.T.: 11.234 min
Delta R.T.: 0.001 min
Response: 5392113
Conc: 33.33 ug/ml




#12 Fluoranthene (C21.85)

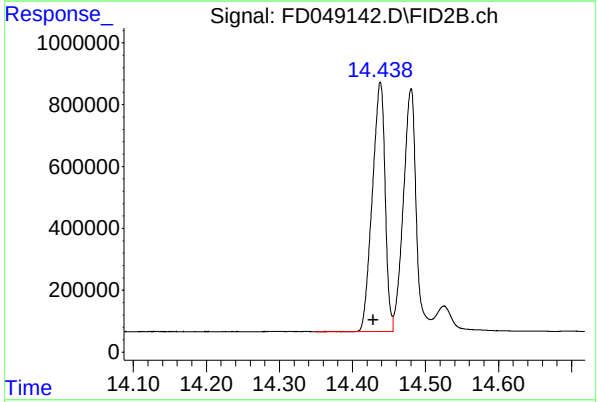
R.T.: 12.273 min
Delta R.T.: 0.006 min
Response: 10603708
Conc: 68.71 ug/ml




#13 Pyrene (C20.8)

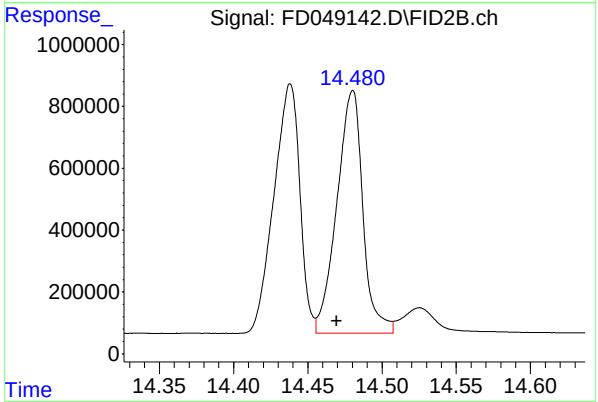
R.T.: 12.566 min
Delta R.T.: 0.008 min
Response: 10302701
Conc: 66.88 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF01-01MS



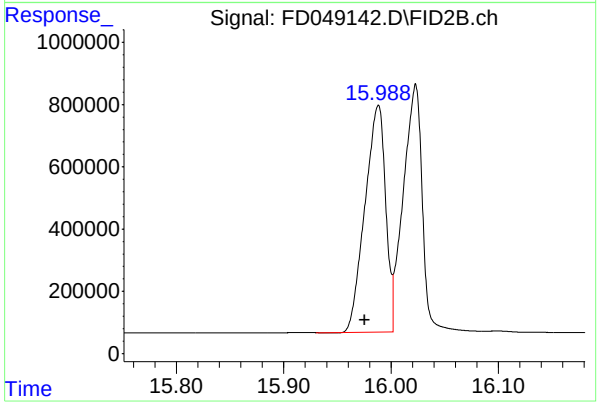

#14 Benzo[a]anthracene (C26.37)

R.T.: 14.438 min
Delta R.T.: 0.010 min
Response: 9819357
Conc: 74.73 ug/ml



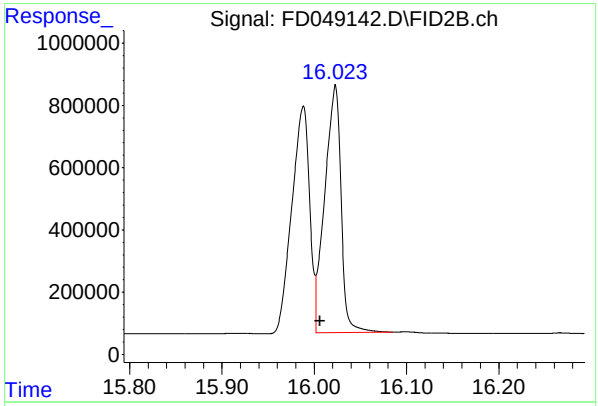

#15 Chrysene (C27.41)

R.T.: 14.480 min
Delta R.T.: 0.011 min
Response: 9593320
Conc: 59.33 ug/ml




#16 benzo[b]fluoranthene (C30.41)

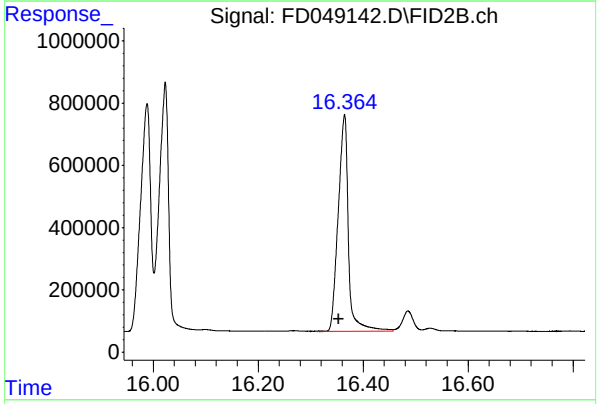
R.T.: 15.988 min
Delta R.T.: 0.013 min
Response: 9767406
Conc: 70.99 ug/ml




#17 Bnezo[k]fluoranthene (C30.14)

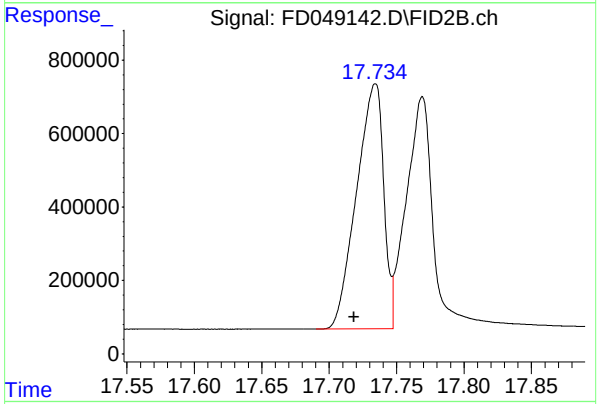
R.T.: 16.023 min
Delta R.T.: 0.017 min
Response: 9783217
Conc: 61.94 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF01-01MS



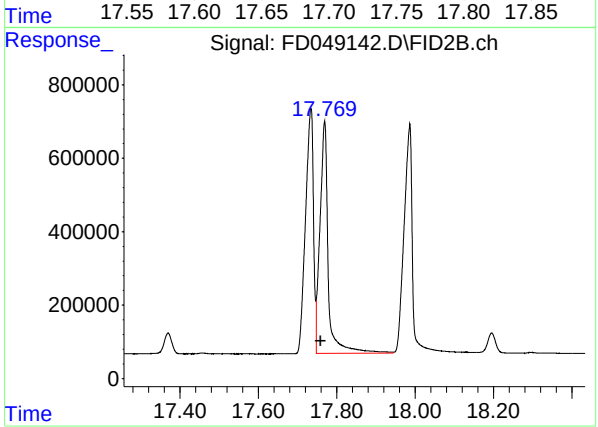

#18 Benzo[a]pyrene (C31.34)

R.T.: 16.364 min
Delta R.T.: 0.011 min
Response: 9405556
Conc: 69.29 ug/ml



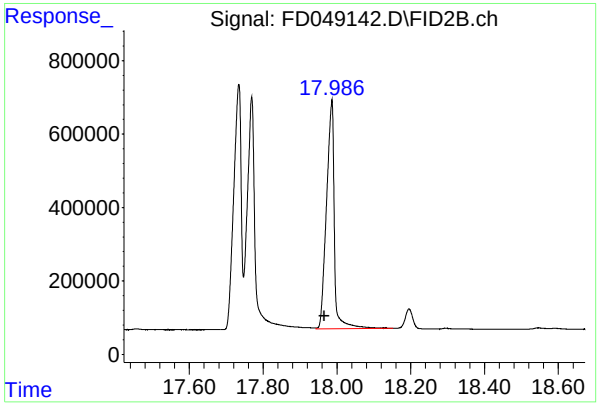

#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.734 min
Delta R.T.: 0.016 min
Response: 9336608
Conc: 85.44 ug/ml




#20 Dibenz[a,h]anthracene (C30.36)

R.T.: 17.769 min
Delta R.T.: 0.010 min
Response: 9340051
Conc: 60.20 ug/ml




#21 Benzo[g,h,i]perylene (C34.01)

R.T.: 17.986 min
Delta R.T.: 0.020 mi
Response: 9206882
Conc: 63.52 ug/m

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF01-01MS

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022825AR\
Data File : FD049142.D
Signal(s) : FID2B.ch
Acq On : 28 Feb 2025 18:56
Sample : Q1421-02
Misc :
ALS Vial : 71 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Title : GC Extractables

Signal : FID2B.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 4.051 | 4.042 | 4.074 | BV | 200 | 1949 | 0.02% | 0.001% |
| 2 | 4.097 | 4.086 | 4.101 | VV | 287 | 1757 | 0.02% | 0.001% |
| 3 | 4.106 | 4.101 | 4.125 | VV | 245 | 2635 | 0.02% | 0.001% |
| 4 | 4.147 | 4.125 | 4.159 | VV | 66954 | 606704 | 5.69% | 0.288% |
| 5 | 4.176 | 4.159 | 4.249 | VV | 809194 | 7172085 | 67.25% | 3.409% |
| 6 | 4.264 | 4.249 | 4.283 | VV | 2629 | 44609 | 0.42% | 0.021% |
| 7 | 4.316 | 4.283 | 4.355 | VV | 4818 | 102157 | 0.96% | 0.049% |
| 8 | 4.372 | 4.355 | 4.386 | VV | 3899 | 44061 | 0.41% | 0.021% |
| 9 | 4.402 | 4.386 | 4.451 | VV | 5595 | 77864 | 0.73% | 0.037% |
| 10 | 4.461 | 4.451 | 4.466 | VV | 476 | 3666 | 0.03% | 0.002% |
| 11 | 4.473 | 4.466 | 4.479 | VV | 549 | 3174 | 0.03% | 0.002% |
| 12 | 4.489 | 4.479 | 4.505 | VV | 815 | 9833 | 0.09% | 0.005% |
| 13 | 4.515 | 4.505 | 4.537 | VV | 940 | 10614 | 0.10% | 0.005% |
| 14 | 4.544 | 4.537 | 4.550 | VV | 343 | 2200 | 0.02% | 0.001% |
| 15 | 4.554 | 4.550 | 4.570 | VV | 319 | 3383 | 0.03% | 0.002% |
| 16 | 4.582 | 4.570 | 4.596 | VV | 709 | 7747 | 0.07% | 0.004% |
| 17 | 4.601 | 4.596 | 4.629 | VV | 492 | 6562 | 0.06% | 0.003% |
| 18 | 4.632 | 4.629 | 4.644 | VV | 227 | 1270 | 0.01% | 0.001% |
| 19 | 4.689 | 4.644 | 4.704 | PV | 686 | 10067 | 0.09% | 0.005% |
| 20 | 4.708 | 4.704 | 4.724 | VV | 421 | 4004 | 0.04% | 0.002% |
| 21 | 4.769 | 4.724 | 4.814 | VV | 10740 | 161309 | 1.51% | 0.077% |
| 22 | 4.828 | 4.814 | 4.879 | VV | 2485 | 35628 | 0.33% | 0.017% |
| 23 | 4.884 | 4.879 | 4.893 | VV | 296 | 1516 | 0.01% | 0.001% |
| 24 | 4.902 | 4.893 | 4.918 | VV | 372 | 3335 | 0.03% | 0.002% |
| 25 | 4.933 | 4.918 | 4.947 | VV | 401 | 4801 | 0.05% | 0.002% |
| 26 | 4.966 | 4.947 | 5.015 | VV | 658 | 12165 | 0.11% | 0.006% |
| 27 | 5.048 | 5.015 | 5.110 | VV | 1751 | 54701 | 0.51% | 0.026% |
| 28 | 5.118 | 5.110 | 5.124 | VV | 639 | 5121 | 0.05% | 0.002% |
| 29 | 5.137 | 5.124 | 5.159 | VV | 830 | 11050 | 0.10% | 0.005% |
| 30 | 5.178 | 5.159 | 5.195 | VV | 1661 | 23212 | 0.22% | 0.011% |
| 31 | 5.211 | 5.195 | 5.254 | VV | 3925 | 52356 | 0.49% | 0.025% |
| 32 | 5.270 | 5.254 | 5.324 | VV | 1122 | 20499 | 0.19% | 0.010% |
| 33 | 5.337 | 5.324 | 5.349 | VV | 519 | 6461 | 0.06% | 0.003% |
| 34 | 5.353 | 5.349 | 5.376 | VV | 487 | 4742 | 0.04% | 0.002% |
| 35 | 5.383 | 5.376 | 5.392 | VV | 292 | 1658 | 0.02% | 0.001% |
| 36 | 5.416 | 5.407 | 5.422 | VV | 300 | 1542 | 0.01% | 0.001% |

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|---|---|---|---|---|---|---|---|---|
| 37 | 5.459 | 5.442 | 5.504 | VV | 623 | 9027 | 0.08% | 0.004% |
| 38 | 5.518 | 5.504 | 5.538 | PV | 410 | 5182 | 0.05% | 0.002% |
| 39 | 5.549 | 5.538 | 5.559 | VV | 189 | 1550 | 0.01% | 0.001% |
| 40 | 5.565 | 5.559 | 5.603 | PV | 240 | 3982 | 0.04% | 0.002% |
| 41 | 5.612 | 5.603 | 5.619 | VV | 211 | 1351 | 0.01% | 0.001% |
| 42 | 5.631 | 5.624 | 5.642 | VV | 181 | 1272 | 0.01% | 0.001% |
| 43 | 5.693 | 5.668 | 5.797 | VV | 793145 | 7931134 | 74.36% | 3.770% |
| 44 | 5.811 | 5.797 | 5.854 | VV | 4295 | 93483 | 0.88% | 0.044% |
| 45 | 5.869 | 5.854 | 5.909 | VV | 2478 | 48819 | 0.46% | 0.023% |
| 46 | 5.935 | 5.909 | 5.989 | VV | 1373 | 40532 | 0.38% | 0.019% |
| 47 | 6.002 | 5.989 | 6.017 | VV | 597 | 7544 | 0.07% | 0.004% |
| 48 | 6.023 | 6.017 | 6.045 | VV | 453 | 5914 | 0.06% | 0.003% |
| 49 | 6.063 | 6.045 | 6.105 | VV | 735 | 19006 | 0.18% | 0.009% |
| 50 | 6.112 | 6.105 | 6.117 | VV | 542 | 3388 | 0.03% | 0.002% |
| 51 | 6.140 | 6.117 | 6.200 | VV | 69527 | 744439 | 6.98% | 0.354% |
| 52 | 6.221 | 6.200 | 6.242 | VV | 1744 | 23671 | 0.22% | 0.011% |
| 53 | 6.261 | 6.242 | 6.275 | VV | 1241 | 13623 | 0.13% | 0.006% |
| 54 | 6.291 | 6.275 | 6.310 | VV | 3148 | 36237 | 0.34% | 0.017% |
| 55 | 6.322 | 6.310 | 6.345 | VV | 898 | 11995 | 0.11% | 0.006% |
| 56 | 6.362 | 6.345 | 6.392 | VV | 1662 | 18852 | 0.18% | 0.009% |
| 57 | 6.399 | 6.392 | 6.407 | VV | 246 | 1640 | 0.02% | 0.001% |
| 58 | 6.412 | 6.407 | 6.436 | VV | 249 | 2069 | 0.02% | 0.001% |
| 59 | 6.471 | 6.436 | 6.494 | PV | 335 | 6665 | 0.06% | 0.003% |
| 60 | 6.506 | 6.494 | 6.510 | VV | 295 | 1869 | 0.02% | 0.001% |
| 61 | 6.515 | 6.510 | 6.539 | VV | 325 | 3837 | 0.04% | 0.002% |
| 62 | 6.577 | 6.547 | 6.601 | VV | 1688 | 20132 | 0.19% | 0.010% |
| 63 | 6.631 | 6.601 | 6.642 | VV | 1678 | 22082 | 0.21% | 0.010% |
| 64 | 6.658 | 6.642 | 6.694 | VV | 16123 | 203178 | 1.91% | 0.097% |
| 65 | 6.702 | 6.694 | 6.710 | VV | 2044 | 17501 | 0.16% | 0.008% |
| 66 | 6.739 | 6.710 | 6.873 | VV | 733466 | 7782063 | 72.97% | 3.699% |
| 67 | 6.879 | 6.873 | 6.886 | VV | 1511 | 11215 | 0.11% | 0.005% |
| 68 | 6.913 | 6.886 | 6.957 | VV | 8088 | 122141 | 1.15% | 0.058% |
| 69 | 6.989 | 6.957 | 7.010 | VV | 3353 | 71321 | 0.67% | 0.034% |
| 70 | 7.024 | 7.010 | 7.030 | VV | 2196 | 23196 | 0.22% | 0.011% |
| 71 | 7.041 | 7.030 | 7.052 | VV | 2222 | 26499 | 0.25% | 0.013% |
| 72 | 7.059 | 7.052 | 7.081 | VV | 2270 | 28270 | 0.27% | 0.013% |
| 73 | 7.088 | 7.081 | 7.094 | VV | 1071 | 6659 | 0.06% | 0.003% |
| 74 | 7.115 | 7.094 | 7.132 | VV | 1781 | 27765 | 0.26% | 0.013% |
| 75 | 7.145 | 7.132 | 7.170 | VV | 1979 | 26742 | 0.25% | 0.013% |
| 76 | 7.174 | 7.170 | 7.180 | VV | 411 | 2111 | 0.02% | 0.001% |
| 77 | 7.185 | 7.180 | 7.209 | VV | 561 | 6818 | 0.06% | 0.003% |
| 78 | 7.230 | 7.209 | 7.247 | VV | 1002 | 14943 | 0.14% | 0.007% |
| 79 | 7.253 | 7.247 | 7.292 | VV | 587 | 10829 | 0.10% | 0.005% |
| 80 | 7.315 | 7.292 | 7.327 | VV | 2494 | 27722 | 0.26% | 0.013% |
| 81 | 7.352 | 7.327 | 7.477 | VV | 832219 | 8468199 | 79.40% | 4.025% |
| 82 | 7.480 | 7.477 | 7.497 | VV | 1490 | 15443 | 0.14% | 0.007% |
| 83 | 7.510 | 7.497 | 7.530 | VV | 1172 | 19450 | 0.18% | 0.009% |
| 84 | 7.538 | 7.530 | 7.562 | VV | 805 | 12286 | 0.12% | 0.006% |
| 85 | 7.579 | 7.562 | 7.604 | VV | 862 | 14891 | 0.14% | 0.007% |
| 86 | 7.623 | 7.604 | 7.649 | VV | 1713 | 22247 | 0.21% | 0.011% |
| 87 | 7.656 | 7.649 | 7.665 | VV | 377 | 2873 | 0.03% | 0.001% |
| 88 | 7.677 | 7.665 | 7.692 | VV | 562 | 5658 | 0.05% | 0.003% |
| 89 | 7.710 | 7.692 | 7.737 | VV | 743 | 11487 | 0.11% | 0.005% |

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|---|---|---|---|---|---|---|---|---|
| 90 | 7.747 | 7.737 | 7.770 | VV | 346 | 4571 | 0.04% | 0.002% |
| 91 | 7.775 | 7.770 | 7.794 | VV | 370 | 2870 | 0.03% | 0.001% |
| 92 | 7.830 | 7.794 | 7.841 | PV | 493 | 7795 | 0.07% | 0.004% |
| 93 | 7.845 | 7.841 | 7.849 | VV | 322 | 1291 | 0.01% | 0.001% |
| 94 | 7.853 | 7.849 | 7.866 | VV | 272 | 2010 | 0.02% | 0.001% |
| 95 | 7.874 | 7.866 | 7.890 | VV | 319 | 2466 | 0.02% | 0.001% |
| 96 | 7.918 | 7.890 | 7.966 | VV | 76664 | 801713 | 7.52% | 0.381% |
| 97 | 7.972 | 7.966 | 7.978 | VV | 522 | 2714 | 0.03% | 0.001% |
| 98 | 8.005 | 7.978 | 8.095 | VV | 911037 | 9055813 | 84.91% | 4.304% |
| 99 | 8.114 | 8.095 | 8.133 | VV | 1822 | 31019 | 0.29% | 0.015% |
| 100 | 8.147 | 8.133 | 8.173 | VV | 1454 | 22842 | 0.21% | 0.011% |
| 101 | 8.203 | 8.173 | 8.272 | VV | 526994 | 5494210 | 51.51% | 2.612% |
| 102 | 8.300 | 8.272 | 8.367 | VV | 953439 | 9682877 | 90.79% | 4.603% |
| 103 | 8.375 | 8.367 | 8.398 | VV | 3452 | 54189 | 0.51% | 0.026% |
| 104 | 8.409 | 8.398 | 8.421 | VV | 2278 | 28942 | 0.27% | 0.014% |
| 105 | 8.426 | 8.421 | 8.439 | VV | 2045 | 19416 | 0.18% | 0.009% |
| 106 | 8.458 | 8.439 | 8.498 | VV | 2637 | 62203 | 0.58% | 0.030% |
| 107 | 8.514 | 8.498 | 8.545 | VV | 1431 | 24037 | 0.23% | 0.011% |
| 108 | 8.569 | 8.545 | 8.600 | VV | 1240 | 25005 | 0.23% | 0.012% |
| 109 | 8.635 | 8.600 | 8.713 | VV | 86818 | 934105 | 8.76% | 0.444% |
| 110 | 8.746 | 8.713 | 8.787 | VV | 5720 | 112882 | 1.06% | 0.054% |
| 111 | 8.820 | 8.787 | 8.850 | VV | 1900 | 37177 | 0.35% | 0.018% |
| 112 | 8.870 | 8.850 | 8.901 | VV | 879 | 12718 | 0.12% | 0.006% |
| 113 | 8.945 | 8.901 | 8.952 | VV | 570 | 10933 | 0.10% | 0.005% |
| 114 | 8.957 | 8.952 | 8.962 | VV | 501 | 2561 | 0.02% | 0.001% |
| 115 | 8.977 | 8.962 | 8.993 | VV | 555 | 6632 | 0.06% | 0.003% |
| 116 | 9.018 | 8.993 | 9.030 | PV | 873 | 10350 | 0.10% | 0.005% |
| 117 | 9.033 | 9.030 | 9.052 | VV | 664 | 6407 | 0.06% | 0.003% |
| 118 | 9.079 | 9.052 | 9.218 | VV | 919552 | 9905080 | 92.87% | 4.708% |
| 119 | 9.238 | 9.218 | 9.257 | VV | 1598 | 29835 | 0.28% | 0.014% |
| 120 | 9.262 | 9.257 | 9.274 | VV | 878 | 7981 | 0.07% | 0.004% |
| 121 | 9.314 | 9.274 | 9.369 | VV | 8290 | 185349 | 1.74% | 0.088% |
| 122 | 9.385 | 9.369 | 9.480 | VV | 15834 | 371651 | 3.48% | 0.177% |
| 123 | 9.506 | 9.480 | 9.558 | VV | 79885 | 884992 | 8.30% | 0.421% |
| 124 | 9.592 | 9.558 | 9.635 | VV | 994 | 34197 | 0.32% | 0.016% |
| 125 | 9.655 | 9.635 | 9.670 | VV | 484 | 7859 | 0.07% | 0.004% |
| 126 | 9.686 | 9.670 | 9.714 | VV | 420 | 6043 | 0.06% | 0.003% |
| 127 | 9.762 | 9.714 | 9.769 | PV | 438 | 4785 | 0.04% | 0.002% |
| 128 | 9.777 | 9.769 | 9.790 | VV | 456 | 4352 | 0.04% | 0.002% |
| 129 | 9.822 | 9.790 | 9.843 | VV | 1018 | 17425 | 0.16% | 0.008% |
| 130 | 9.858 | 9.843 | 9.867 | VV | 473 | 5264 | 0.05% | 0.003% |
| 131 | 9.882 | 9.867 | 9.888 | VV | 601 | 6706 | 0.06% | 0.003% |
| 132 | 9.894 | 9.888 | 9.919 | VV | 854 | 11228 | 0.11% | 0.005% |
| 133 | 9.934 | 9.919 | 9.957 | VV | 927 | 14006 | 0.13% | 0.007% |
| 134 | 9.967 | 9.957 | 9.974 | VV | 591 | 4945 | 0.05% | 0.002% |
| 135 | 9.978 | 9.974 | 9.990 | VV | 561 | 4749 | 0.04% | 0.002% |
| 136 | 10.010 | 9.990 | 10.042 | VV | 1696 | 22351 | 0.21% | 0.011% |
| 137 | 10.051 | 10.042 | 10.057 | VV | 344 | 1640 | 0.02% | 0.001% |
| 138 | 10.101 | 10.057 | 10.114 | VV | 1033 | 17019 | 0.16% | 0.008% |
| 139 | 10.131 | 10.114 | 10.157 | VV | 859 | 14601 | 0.14% | 0.007% |
| 140 | 10.182 | 10.157 | 10.204 | VV | 920 | 16808 | 0.16% | 0.008% |
| 141 | 10.237 | 10.204 | 10.248 | VV | 1208 | 19381 | 0.18% | 0.009% |

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|---|---|---|---|---|---|---|---|---|
| 142 | 10.253 | 10.248 | 10.271 | VV | 1291 | 12598 | 0.12% | 0.006% |
| 143 | 10.288 | 10.271 | 10.297 | VV | 5325 | 57446 | 0.54% | 0.027% |
| 144 | 10.301 | 10.297 | 10.344 | VV | 5071 | 85103 | 0.80% | 0.040% |
| 145 | 10.363 | 10.344 | 10.394 | VV | 2702 | 42527 | 0.40% | 0.020% |
| 146 | 10.402 | 10.394 | 10.415 | VV | 453 | 4799 | 0.04% | 0.002% |
| 147 | 10.468 | 10.415 | 10.513 | VV | 959109 | 10175341 | 95.41% | 4.837% |
| 148 | 10.543 | 10.513 | 10.650 | VV | 865227 | 10276064 | 96.35% | 4.884% |
| 149 | 10.655 | 10.650 | 10.783 | VV | 5325 | 192747 | 1.81% | 0.092% |
| 150 | 10.801 | 10.783 | 10.808 | VV | 960 | 13324 | 0.12% | 0.006% |
| 151 | 10.815 | 10.808 | 10.840 | VV | 921 | 14729 | 0.14% | 0.007% |
| 152 | 10.846 | 10.840 | 10.853 | VV | 680 | 4871 | 0.05% | 0.002% |
| 153 | 10.874 | 10.853 | 10.888 | VV | 1240 | 21058 | 0.20% | 0.010% |
| 154 | 10.892 | 10.888 | 10.906 | VV | 1241 | 12913 | 0.12% | 0.006% |
| 155 | 10.937 | 10.906 | 10.978 | VV | 80624 | 916417 | 8.59% | 0.436% |
| 156 | 10.987 | 10.978 | 10.995 | VV | 935 | 8441 | 0.08% | 0.004% |
| 157 | 11.027 | 10.995 | 11.055 | VV | 1374 | 32725 | 0.31% | 0.016% |
| 158 | 11.061 | 11.055 | 11.082 | VV | 517 | 6492 | 0.06% | 0.003% |
| 159 | 11.084 | 11.082 | 11.089 | VV | 468 | 1545 | 0.01% | 0.001% |
| 160 | 11.091 | 11.089 | 11.097 | VV | 452 | 1825 | 0.02% | 0.001% |
| 161 | 11.101 | 11.097 | 11.105 | VV | 283 | 1124 | 0.01% | 0.001% |
| 162 | 11.122 | 11.105 | 11.127 | VV | 450 | 3943 | 0.04% | 0.002% |
| 163 | 11.146 | 11.127 | 11.152 | VV | 468 | 5580 | 0.05% | 0.003% |
| 164 | 11.157 | 11.152 | 11.202 | VV | 450 | 5023 | 0.05% | 0.002% |
| 165 | 11.234 | 11.202 | 11.308 | PV | 491209 | 5436431 | 50.97% | 2.584% |
| 166 | 11.320 | 11.308 | 11.335 | VV | 1361 | 18120 | 0.17% | 0.009% |
| 167 | 11.338 | 11.335 | 11.363 | VV | 856 | 12192 | 0.11% | 0.006% |
| 168 | 11.375 | 11.363 | 11.385 | VV | 1117 | 11249 | 0.11% | 0.005% |
| 169 | 11.407 | 11.385 | 11.444 | VV | 1757 | 28183 | 0.26% | 0.013% |
| 170 | 11.461 | 11.444 | 11.481 | VV | 369 | 5860 | 0.05% | 0.003% |
| 171 | 11.510 | 11.481 | 11.522 | VV | 1254 | 22960 | 0.22% | 0.011% |
| 172 | 11.532 | 11.522 | 11.549 | VV | 1360 | 17580 | 0.16% | 0.008% |
| 173 | 11.561 | 11.549 | 11.577 | VV | 1365 | 19769 | 0.19% | 0.009% |
| 174 | 11.593 | 11.577 | 11.615 | VV | 1474 | 25919 | 0.24% | 0.012% |
| 175 | 11.618 | 11.615 | 11.625 | VV | 818 | 4558 | 0.04% | 0.002% |
| 176 | 11.629 | 11.625 | 11.635 | VV | 904 | 4702 | 0.04% | 0.002% |
| 177 | 11.662 | 11.635 | 11.696 | VV | 7388 | 104342 | 0.98% | 0.050% |
| 178 | 11.702 | 11.696 | 11.718 | VV | 752 | 7375 | 0.07% | 0.004% |
| 179 | 11.737 | 11.718 | 11.750 | VV | 887 | 14523 | 0.14% | 0.007% |
| 180 | 11.760 | 11.750 | 11.775 | VV | 894 | 9693 | 0.09% | 0.005% |
| 181 | 11.815 | 11.775 | 11.836 | VV | 2082 | 42497 | 0.40% | 0.020% |
| 182 | 11.857 | 11.836 | 11.923 | VV | 28885 | 405403 | 3.80% | 0.193% |
| 183 | 11.932 | 11.923 | 11.959 | VV | 1958 | 32662 | 0.31% | 0.016% |
| 184 | 11.976 | 11.959 | 11.993 | VV | 1482 | 25899 | 0.24% | 0.012% |
| 185 | 12.015 | 11.993 | 12.040 | VV | 1390 | 29080 | 0.27% | 0.014% |
| 186 | 12.103 | 12.040 | 12.135 | VV | 7321 | 134707 | 1.26% | 0.064% |
| 187 | 12.144 | 12.135 | 12.158 | VV | 828 | 9196 | 0.09% | 0.004% |
| 188 | 12.178 | 12.158 | 12.197 | VV | 2181 | 30313 | 0.28% | 0.014% |
| 189 | 12.239 | 12.197 | 12.248 | VV | 79220 | 875296 | 8.21% | 0.416% |
| 190 | 12.273 | 12.248 | 12.427 | VV | 912682 | 10665336 | 100.00% | 5.070% |
| 191 | 12.436 | 12.427 | 12.450 | VV | 817 | 9715 | 0.09% | 0.005% |
| 192 | 12.467 | 12.450 | 12.507 | VV | 7234 | 99938 | 0.94% | 0.048% |
| 193 | 12.513 | 12.507 | 12.527 | VV | 893 | 8905 | 0.08% | 0.004% |
| 194 | 12.566 | 12.527 | 12.630 | VV | 887669 | 10352709 | 97.07% | 4.921% |

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| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 195 | 12.647 | 12.630 | 12.651 | VV | 8220 | 86525 | 0.81% | 0.041% |
| 196 | 12.676 | 12.651 | 12.724 | VV | 97675 | 1268327 | 11.89% | 0.603% |
| 197 | 12.726 | 12.724 | 12.778 | VV | 2129 | 48686 | 0.46% | 0.023% |
| 198 | 12.783 | 12.778 | 12.791 | VV | 1161 | 8032 | 0.08% | 0.004% |
| 199 | 12.801 | 12.791 | 12.807 | VV | 988 | 8990 | 0.08% | 0.004% |
| 200 | 12.812 | 12.807 | 12.817 | VV | 948 | 5699 | 0.05% | 0.003% |
| 201 | 12.846 | 12.817 | 12.887 | VV | 72685 | 878950 | 8.24% | 0.418% |
| 202 | 12.910 | 12.887 | 12.944 | VV | 4655 | 74190 | 0.70% | 0.035% |
| 203 | 12.965 | 12.944 | 12.972 | VV | 860 | 12682 | 0.12% | 0.006% |
| 204 | 12.989 | 12.972 | 13.017 | VV | 921 | 20436 | 0.19% | 0.010% |
| 205 | 13.038 | 13.017 | 13.065 | VV | 1218 | 27663 | 0.26% | 0.013% |
| 206 | 13.084 | 13.065 | 13.170 | VV | 9050 | 195629 | 1.83% | 0.093% |
| 207 | 13.175 | 13.170 | 13.193 | VV | 1156 | 13485 | 0.13% | 0.006% |
| 208 | 13.200 | 13.193 | 13.210 | VV | 910 | 8136 | 0.08% | 0.004% |
| 209 | 13.224 | 13.210 | 13.229 | VV | 909 | 8915 | 0.08% | 0.004% |
| 210 | 13.235 | 13.229 | 13.243 | VV | 806 | 6098 | 0.06% | 0.003% |
| 211 | 13.262 | 13.243 | 13.284 | VV | 975 | 20576 | 0.19% | 0.010% |
| 212 | 13.296 | 13.284 | 13.324 | VV | 1002 | 17856 | 0.17% | 0.008% |
| 213 | 13.327 | 13.324 | 13.349 | VV | 652 | 8655 | 0.08% | 0.004% |
| 214 | 13.384 | 13.349 | 13.402 | VV | 2352 | 44085 | 0.41% | 0.021% |
| 215 | 13.428 | 13.402 | 13.475 | VV | 71602 | 872259 | 8.18% | 0.415% |
| 216 | 13.479 | 13.475 | 13.482 | VV | 640 | 2234 | 0.02% | 0.001% |
| 217 | 13.487 | 13.482 | 13.512 | VV | 631 | 7759 | 0.07% | 0.004% |
| 218 | 13.535 | 13.512 | 13.544 | VV | 483 | 5924 | 0.06% | 0.003% |
| 219 | 13.548 | 13.544 | 13.577 | VV | 297 | 4546 | 0.04% | 0.002% |
| 220 | 13.580 | 13.577 | 13.594 | VV | 195 | 1378 | 0.01% | 0.001% |
| 221 | 13.597 | 13.594 | 13.617 | VV | 126 | 1127 | 0.01% | 0.001% |
| 222 | 13.621 | 13.617 | 13.636 | PV | 156 | 1184 | 0.01% | 0.001% |
| 223 | 13.642 | 13.636 | 13.655 | VV | 295 | 2314 | 0.02% | 0.001% |
| 224 | 13.657 | 13.655 | 13.667 | VV | 320 | 1227 | 0.01% | 0.001% |
| 225 | 13.688 | 13.667 | 13.707 | VV | 385 | 6584 | 0.06% | 0.003% |
| 226 | 13.713 | 13.707 | 13.720 | VV | 375 | 2065 | 0.02% | 0.001% |
| 227 | 13.760 | 13.720 | 13.776 | VV | 463 | 9273 | 0.09% | 0.004% |
| 228 | 13.788 | 13.776 | 13.796 | VV | 381 | 2968 | 0.03% | 0.001% |
| 229 | 13.801 | 13.796 | 13.807 | VV | 365 | 1749 | 0.02% | 0.001% |
| 230 | 13.811 | 13.807 | 13.815 | VV | 367 | 1539 | 0.01% | 0.001% |
| 231 | 13.826 | 13.815 | 13.837 | VV | 587 | 6565 | 0.06% | 0.003% |
| 232 | 13.869 | 13.837 | 13.902 | VV | 1878 | 36177 | 0.34% | 0.017% |
| 233 | 13.908 | 13.902 | 13.915 | VV | 485 | 3250 | 0.03% | 0.002% |
| 234 | 13.919 | 13.915 | 13.934 | VV | 438 | 3758 | 0.04% | 0.002% |
| 235 | 13.940 | 13.934 | 14.012 | VV | 382 | 17155 | 0.16% | 0.008% |
| 236 | 14.033 | 14.012 | 14.052 | VV | 432 | 7333 | 0.07% | 0.003% |
| 237 | 14.067 | 14.052 | 14.078 | VV | 447 | 5509 | 0.05% | 0.003% |
| 238 | 14.085 | 14.078 | 14.105 | VV | 619 | 7334 | 0.07% | 0.003% |
| 239 | 14.111 | 14.105 | 14.117 | VV | 559 | 3365 | 0.03% | 0.002% |
| 240 | 14.132 | 14.117 | 14.137 | VV | 690 | 6708 | 0.06% | 0.003% |
| 241 | 14.156 | 14.137 | 14.164 | VV | 674 | 8016 | 0.08% | 0.004% |
| 242 | 14.167 | 14.164 | 14.173 | VV | 406 | 1856 | 0.02% | 0.001% |
| 243 | 14.194 | 14.173 | 14.214 | VV | 474 | 9586 | 0.09% | 0.005% |
| 244 | 14.222 | 14.214 | 14.229 | VV | 520 | 3538 | 0.03% | 0.002% |
| 245 | 14.235 | 14.229 | 14.239 | VV | 416 | 2379 | 0.02% | 0.001% |
| 246 | 14.243 | 14.239 | 14.262 | VV | 488 | 4644 | 0.04% | 0.002% |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 247 | 14.287 | 14.262 | 14.294 | VV | 690 | 8547 | 0.08% | 0.004% |
| 248 | 14.300 | 14.294 | 14.309 | VV | 727 | 5752 | 0.05% | 0.003% |
| 249 | 14.315 | 14.309 | 14.321 | VV | 704 | 4011 | 0.04% | 0.002% |
| 250 | 14.326 | 14.321 | 14.332 | VV | 663 | 3639 | 0.03% | 0.002% |
| 251 | 14.338 | 14.332 | 14.359 | VV | 805 | 7951 | 0.07% | 0.004% |
| 252 | 14.374 | 14.359 | 14.379 | VV | 710 | 6675 | 0.06% | 0.003% |
| 253 | 14.382 | 14.379 | 14.402 | VV | 625 | 6411 | 0.06% | 0.003% |
| 254 | 14.438 | 14.402 | 14.456 | VV | 807419 | 9837573 | 92.24% | 4.676% |
| 255 | 14.480 | 14.456 | 14.507 | VV | 786236 | 9615926 | 90.16% | 4.571% |
| 256 | 14.525 | 14.507 | 14.674 | VV | 83192 | 1533940 | 14.38% | 0.729% |
| 257 | 14.698 | 14.674 | 14.727 | VV | 1824 | 47432 | 0.44% | 0.023% |
| 258 | 14.738 | 14.727 | 14.770 | VV | 1205 | 24157 | 0.23% | 0.011% |
| 259 | 14.773 | 14.770 | 14.790 | VV | 780 | 8300 | 0.08% | 0.004% |
| 260 | 14.807 | 14.790 | 14.817 | VV | 777 | 10555 | 0.10% | 0.005% |
| 261 | 14.834 | 14.817 | 14.843 | VV | 972 | 10798 | 0.10% | 0.005% |
| 262 | 14.849 | 14.843 | 14.863 | VV | 677 | 7364 | 0.07% | 0.004% |
| 263 | 14.903 | 14.863 | 14.970 | VV | 15235 | 283632 | 2.66% | 0.135% |
| 264 | 14.976 | 14.970 | 14.982 | VV | 1372 | 9086 | 0.09% | 0.004% |
| 265 | 14.990 | 14.982 | 15.016 | VV | 1529 | 22470 | 0.21% | 0.011% |
| 266 | 15.029 | 15.016 | 15.035 | VV | 942 | 9881 | 0.09% | 0.005% |
| 267 | 15.060 | 15.035 | 15.090 | VV | 2621 | 46533 | 0.44% | 0.022% |
| 268 | 15.105 | 15.090 | 15.122 | VV | 761 | 10668 | 0.10% | 0.005% |
| 269 | 15.125 | 15.122 | 15.156 | VV | 516 | 8200 | 0.08% | 0.004% |
| 270 | 15.169 | 15.156 | 15.175 | VV | 577 | 5206 | 0.05% | 0.002% |
| 271 | 15.178 | 15.175 | 15.202 | VV | 550 | 7725 | 0.07% | 0.004% |
| 272 | 15.208 | 15.202 | 15.214 | VV | 633 | 3812 | 0.04% | 0.002% |
| 273 | 15.242 | 15.214 | 15.257 | VV | 1191 | 20756 | 0.19% | 0.010% |
| 274 | 15.261 | 15.257 | 15.288 | VV | 705 | 8332 | 0.08% | 0.004% |
| 275 | 15.293 | 15.288 | 15.297 | VV | 285 | 1513 | 0.01% | 0.001% |
| 276 | 15.302 | 15.297 | 15.309 | VV | 502 | 2774 | 0.03% | 0.001% |
| 277 | 15.312 | 15.309 | 15.320 | VV | 416 | 2600 | 0.02% | 0.001% |
| 278 | 15.345 | 15.320 | 15.350 | VV | 781 | 10605 | 0.10% | 0.005% |
| 279 | 15.361 | 15.350 | 15.374 | VV | 760 | 9347 | 0.09% | 0.004% |
| 280 | 15.390 | 15.374 | 15.408 | VV | 821 | 13919 | 0.13% | 0.007% |
| 281 | 15.422 | 15.408 | 15.431 | VV | 867 | 10107 | 0.09% | 0.005% |
| 282 | 15.446 | 15.431 | 15.469 | VV | 885 | 16564 | 0.16% | 0.008% |
| 283 | 15.474 | 15.469 | 15.482 | VV | 578 | 4088 | 0.04% | 0.002% |
| 284 | 15.503 | 15.482 | 15.512 | VV | 1721 | 21554 | 0.20% | 0.010% |
| 285 | 15.542 | 15.512 | 15.578 | VV | 64394 | 815203 | 7.64% | 0.387% |
| 286 | 15.583 | 15.578 | 15.630 | VV | 917 | 17000 | 0.16% | 0.008% |
| 287 | 15.636 | 15.630 | 15.659 | VV | 238 | 2610 | 0.02% | 0.001% |
| 288 | 15.699 | 15.659 | 15.732 | VV | 1871 | 29386 | 0.28% | 0.014% |
| 289 | 15.737 | 15.732 | 15.742 | VV | 408 | 1762 | 0.02% | 0.001% |
| 290 | 15.749 | 15.742 | 15.784 | VV | 323 | 5502 | 0.05% | 0.003% |
| 291 | 15.794 | 15.784 | 15.799 | VV | 327 | 1956 | 0.02% | 0.001% |
| 292 | 15.806 | 15.799 | 15.834 | VV | 274 | 4040 | 0.04% | 0.002% |
| 293 | 15.854 | 15.834 | 15.867 | VV | 309 | 4156 | 0.04% | 0.002% |
| 294 | 15.915 | 15.878 | 15.950 | PV | 1664 | 34194 | 0.32% | 0.016% |
| 295 | 15.988 | 15.950 | 16.002 | VV | 733411 | 9839949 | 92.26% | 4.677% |
| 296 | 16.023 | 16.002 | 16.085 | VV | 801622 | 9987928 | 93.65% | 4.748% |
| 297 | 16.100 | 16.085 | 16.175 | VV | 6478 | 164447 | 1.54% | 0.078% |
| 298 | 16.209 | 16.175 | 16.220 | VV | 1580 | 39604 | 0.37% | 0.019% |
| 299 | 16.225 | 16.220 | 16.248 | VV | 1650 | 21318 | 0.20% | 0.010% |

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|---|---|---|---|---|---|---|---|---|
| 300 | 16.266 | 16.248 | 16.305 | VV | 2789 | 48714 | 0.46% | 0.023% |
| 301 | 16.312 | 16.305 | 16.325 | VV | 797 | 8447 | 0.08% | 0.004% |
| 302 | 16.364 | 16.325 | 16.457 | VV | 699804 | 9463870 | 88.73% | 4.498% |
| 303 | 16.485 | 16.457 | 16.512 | VV | 65754 | 958399 | 8.99% | 0.456% |
| 304 | 16.528 | 16.512 | 16.587 | VV | 10279 | 190737 | 1.79% | 0.091% |
| 305 | 16.590 | 16.587 | 16.630 | VV | 1305 | 23976 | 0.22% | 0.011% |
| 306 | 16.651 | 16.630 | 16.680 | VV | 986 | 21212 | 0.20% | 0.010% |
| 307 | 16.687 | 16.680 | 16.699 | VV | 651 | 6350 | 0.06% | 0.003% |
| 308 | 16.704 | 16.699 | 16.719 | VV | 793 | 7174 | 0.07% | 0.003% |
| 309 | 16.723 | 16.719 | 16.734 | VV | 417 | 3260 | 0.03% | 0.002% |
| 310 | 16.739 | 16.734 | 16.750 | VV | 392 | 3204 | 0.03% | 0.002% |
| 311 | 16.795 | 16.750 | 16.817 | VV | 1419 | 26779 | 0.25% | 0.013% |
| 312 | 16.822 | 16.817 | 16.829 | VV | 368 | 2250 | 0.02% | 0.001% |
| 313 | 16.856 | 16.829 | 16.890 | VV | 1073 | 24292 | 0.23% | 0.012% |
| 314 | 16.935 | 16.890 | 16.968 | VV | 2429 | 46569 | 0.44% | 0.022% |
| 315 | 16.975 | 16.968 | 16.989 | VV | 494 | 4292 | 0.04% | 0.002% |
| 316 | 16.991 | 16.989 | 16.998 | VV | 435 | 2048 | 0.02% | 0.001% |
| 317 | 17.025 | 16.998 | 17.052 | VV | 709 | 14835 | 0.14% | 0.007% |
| 318 | 17.064 | 17.052 | 17.077 | VV | 564 | 5942 | 0.06% | 0.003% |
| 319 | 17.082 | 17.077 | 17.135 | VV | 371 | 8045 | 0.08% | 0.004% |
| 320 | 17.175 | 17.135 | 17.200 | VV | 570 | 14076 | 0.13% | 0.007% |
| 321 | 17.218 | 17.200 | 17.227 | VV | 497 | 6399 | 0.06% | 0.003% |
| 322 | 17.232 | 17.227 | 17.237 | VV | 561 | 2755 | 0.03% | 0.001% |
| 323 | 17.257 | 17.237 | 17.285 | VV | 1124 | 19989 | 0.19% | 0.010% |
| 324 | 17.298 | 17.285 | 17.305 | VV | 671 | 6128 | 0.06% | 0.003% |
| 325 | 17.370 | 17.305 | 17.421 | VV | 57411 | 810224 | 7.60% | 0.385% |
| 326 | 17.426 | 17.421 | 17.432 | VV | 378 | 2214 | 0.02% | 0.001% |
| 327 | 17.456 | 17.432 | 17.486 | VV | 2731 | 41462 | 0.39% | 0.020% |
| 328 | 17.493 | 17.486 | 17.508 | VV | 465 | 5265 | 0.05% | 0.003% |
| 329 | 17.517 | 17.508 | 17.522 | VV | 461 | 3206 | 0.03% | 0.002% |
| 330 | 17.528 | 17.522 | 17.542 | VV | 408 | 4093 | 0.04% | 0.002% |
| 331 | 17.569 | 17.542 | 17.594 | VV | 464 | 9621 | 0.09% | 0.005% |
| 332 | 17.620 | 17.594 | 17.627 | PV | 226 | 3085 | 0.03% | 0.001% |
| 333 | 17.634 | 17.627 | 17.642 | VV | 131 | 1265 | 0.01% | 0.001% |
| 334 | 17.660 | 17.642 | 17.677 | VV | 626 | 7186 | 0.07% | 0.003% |
| 335 | 17.734 | 17.677 | 17.747 | VV | 669070 | 9359859 | 87.76% | 4.449% |
| 336 | 17.769 | 17.747 | 17.944 | VV | 632255 | 9475979 | 88.85% | 4.504% |
| 337 | 17.986 | 17.944 | 18.152 | VV | 628212 | 9464386 | 88.74% | 4.499% |
| 338 | 18.195 | 18.152 | 18.238 | VV | 55558 | 816334 | 7.65% | 0.388% |
| 339 | 18.241 | 18.238 | 18.280 | VV | 751 | 9095 | 0.09% | 0.004% |

Sum of corrected areas: 210382375

Aromatic EPH 021125.M Sat Mar 01 04:01:07 2025

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Weston Solutions, Inc. | Date Collected: | 02/24/25 |
| Project: | RFP 905 | Date Received: | 02/24/25 |
| Client Sample ID: | P001-CLAY-CF01-01MS | SDG No.: | Q1421 |
| Lab Sample ID: | Q1421-05 | Matrix: | Water |
| Analytical Method: | NJEPH | % Solid: | 0 |
| Sample Wt/Vol: | 1000 Units: mL | Final Vol: | 2000 uL |
| Soil Aliquot Vol: | uL | Test: | EPH |
| Prep Method : | SW3510 | | |

| File ID : | Dilution: | Prep Date : | Date Analyzed : | Prep Batch ID |
|---|---|---|---|---|
| FC068312.D | 1 | 02/26/25 | 02/27/25 | PB166883 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| Aliphatic C9-C12 | Aliphatic C9-C12 | 201 | | 5.76 | 30.0 | ug/l |
| Aliphatic C12-C16 | Aliphatic C12-C16 | 158 | | 3.61 | 20.0 | ug/l |
| Aliphatic C16-C21 | Aliphatic C16-C21 | 238 | | 5.14 | 30.0 | ug/l |
| Aliphatic C21-C28 | Aliphatic C21-C28 | 320 | | 8.97 | 40.0 | ug/l |
| Aliphatic C28-C40 | Aliphatic C28-C40 | 531 | | 17.0 | 60.0 | ug/l |
| **SURROGATES** | | | | | | |
| 3383-33-2 | 1-chlorooctadecane (SURR) | 34.7 | | 40 - 140 | 69% | SPK: 50 |
| 84-15-1 | ortho-Terphenyl (SURR) | 0.00 | | 40 - 140 | 0% | SPK: 50 |

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

# Quantitation Report For Aliphatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | Q1421-05 | Acq On: | 27 Feb 2025 14:03 |
| Client Sample ID: | P001-CLAY-CF01-01MS | Operator: | YP/AJ |
| Data file: | FC068312.D | Misc: | |
| Instrument: | FID_C | ALS Vial: | 15 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aliphatic C9-C12 | 3.104 | 6.370 | 14219855 | 100.825 | 300 | ug/ml |
| Aliphatic C12-C16 | 6.371 | 9.754 | 10816763 | 79.154 | 200 | ug/ml |
| Aliphatic C16-C21 | 9.755 | 13.108 | 15702633 | 119.293 | 300 | ug/ml |
| Aliphatic C21-C28 | 13.109 | 16.762 | 19637716 | 160.058 | 400 | ug/ml |
| Aliphatic C28-C40 | 16.763 | 21.566 | 27320361 | 265.642 | 600 | ug/ml |
| Aliphatic EPH | 3.104 | 21.566 | 87697328 | 724.972 | | ug/ml |
| ortho-Terphenyl (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |
| 1-chlorooctadecane (SURR) | 12.840 | 12.840 | 3904213 | 34.71 | | ug/ml |
| Aliphatic C9-C28 | 3.104 | 16.762 | 60376967 | 459.33 | 1200 | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022725AL\
Data File : FC068312.D
Signal(s) : FID1A.ch
Acq On : 27 Feb 2025 14:03
Operator : YP/AJ
Sample : Q1421-05
Misc :
ALS Vial : 15 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
P001-CLAY-CF01-01MS

**Manual Integrations APPROVED**

Reviewed By :Yogesh Patel 03/05/2025
Supervised By :Ankita Jodhani 03/05/2025

Integration File: autoint1.e
Quant Time: Mar 05 04:44:32 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

| | Compound | R.T. | Response | Conc Units |
|---|---|---|---|---|
| | **System Monitoring Compounds** | | | |
| 12) S | 1-chlorooctadecane (S... | 12.840 | 3904213 | 34.712 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 69.42% |
| | **Target Compounds** | | | |
| 1) T | n-Nonane (C9) | 3.206 | 4022050 | 28.591 ug/ml |
| 2) T | n-Decane (C10) | 4.263 | 4575486 | 32.296 ug/ml |
| 4) T | n-Dodecane (C12) | 6.271 | 4874122 | 34.628 ug/ml |
| 6) T | n-Tetradecane (C14) | 8.060 | 4965346 | 36.418 ug/ml |
| 7) T | n-Hexadecane (C16) | 9.656 | 4960780 | 36.219 ug/ml |
| 8) T | n-Octadecane (C18) | 11.094 | 5053949 | 36.955 ug/ml |
| 10) T | n-Eicosane (C20) | 12.401 | 5159155 | 39.598 ug/ml |
| 11) T | n-Heneicosane (C21) | 13.012 | 4939006 | 38.632 ug/ml |
| 13) T | n-Docosane (C22) | 13.596 | 4933624 | 39.147 ug/ml |
| 14) T | n-Tetracosane (C24) | 14.698 | 4864443 | 39.110 ug/ml |
| 15) T | n-Hexacosane (C26) | 15.717 | 4768879 | 39.220 ug/ml |
| 16) T | n-Octacosane (C28) | 16.665 | 4622336 | 38.919 ug/ml |
| 17) T | n-Tricontane (C30) | 17.552 | 4660035 | 38.715 ug/mlm |
| 18) T | n-Dotriacontane (C32) | 18.381 | 4477414 | 38.576 ug/mlm |
| 19) T | n-Tetratriacontane (C34) | 19.166 | 4193800 | 38.810 ug/ml |
| 20) T | n-Hexatriacontane (C36) | 19.904 | 3845962 | 39.992 ug/ml |
| 21) T | n-Octatriacontane (C38) | 20.616 | 3662819 | 40.744 ug/ml |
| 22) T | n-Tetracontane (C40) | 21.473 | 3506889 | 40.532 ug/ml |

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

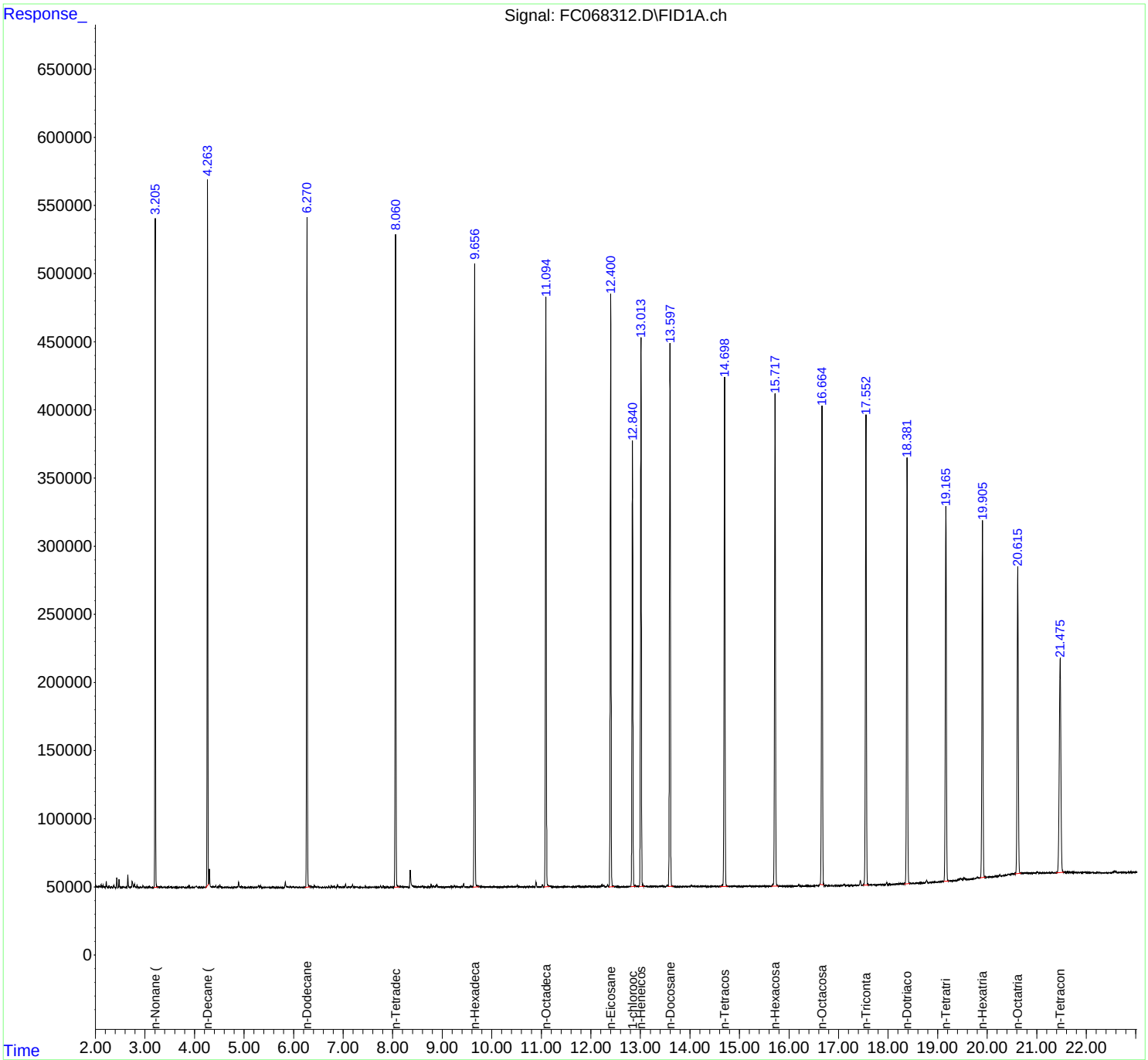
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022725AL\
Data File : FC068312.D
Signal(s) : FID1A.ch
Acq On : 27 Feb 2025 14:03
Operator : YP/AJ
Sample : Q1421-05
Misc :
ALS Vial : 15 Sample Multiplier: 1

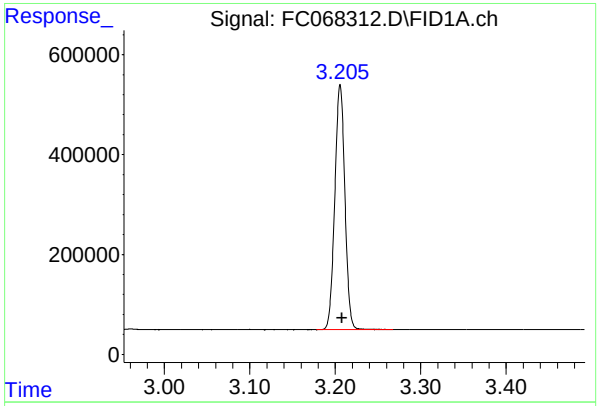
Integration File: autoint1.e
Quant Time: Mar 05 04:44:32 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

**Instrument :**
FID_C
**ClientSampleId :**
P001-CLAY-CF01-01MS

**Manual Integrations APPROVED**
Reviewed By :Yogesh Patel 03/05/2025
Supervised By :Ankita Jodhani 03/05/2025





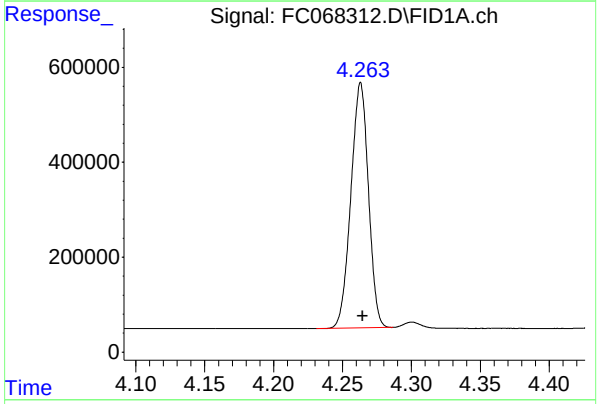

#1 n-Nonane (C9)

R.T.: 3.206 min
Delta R.T.: -0.002 min
Response: 4022050
Conc: 28.59 ug/ml

**Instrument :**
FID_C
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P001-CLAY-CF01-01MS

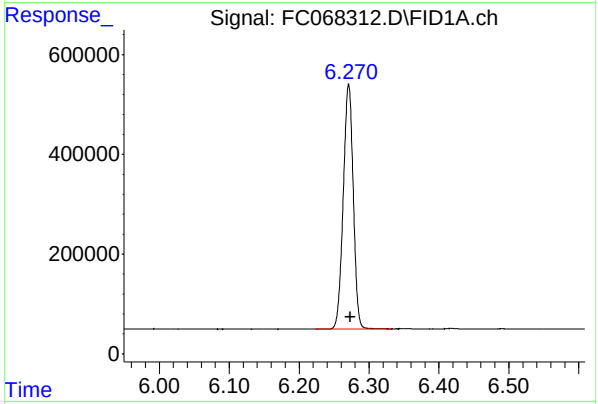
**Manual Integrations APPROVED**

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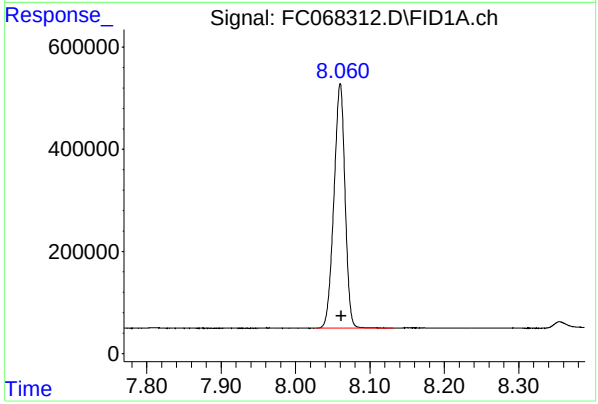

#2 n-Decane (C10)

R.T.: 4.263 min
Delta R.T.: -0.002 min
Response: 4575486
Conc: 32.30 ug/ml



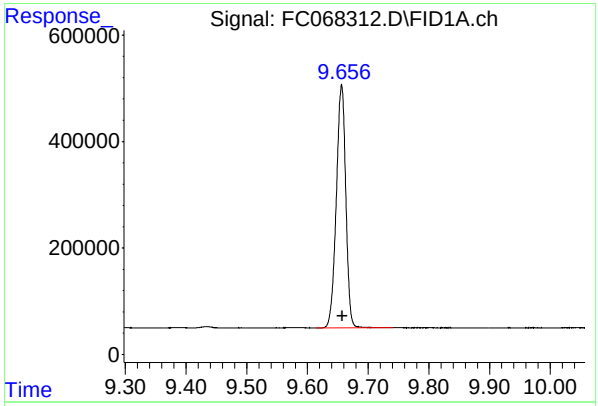

#4 n-Dodecane (C12)

R.T.: 6.271 min
Delta R.T.: -0.002 min
Response: 4874122
Conc: 34.63 ug/ml




#6 n-Tetradecane (C14)

R.T.: 8.060 min
Delta R.T.: -0.002 min
Response: 4965346
Conc: 36.42 ug/ml



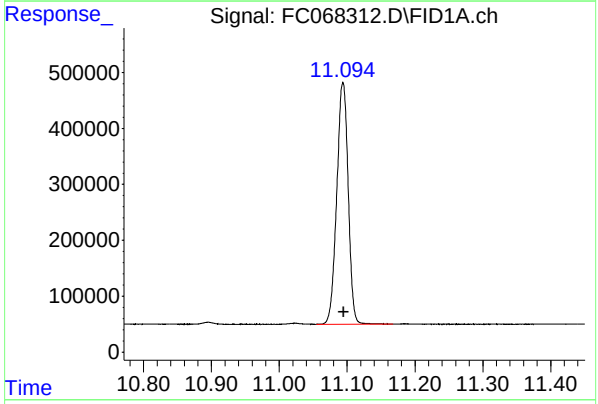

#7 n-Hexadecane (C16)

R.T.: 9.656 min
Delta R.T.: -0.001 min
Response: 4960780
Conc: 36.22 ug/ml

**Instrument :**
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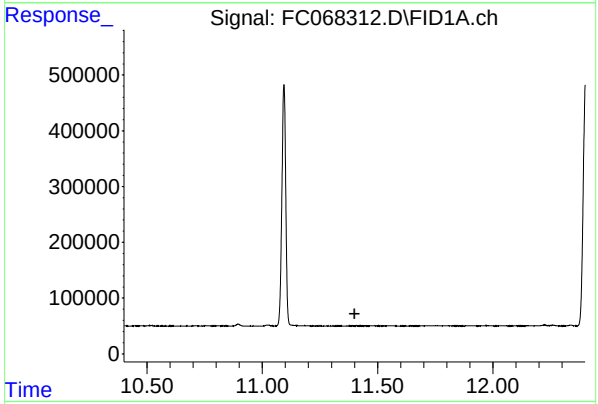
**Manual Integrations APPROVED**

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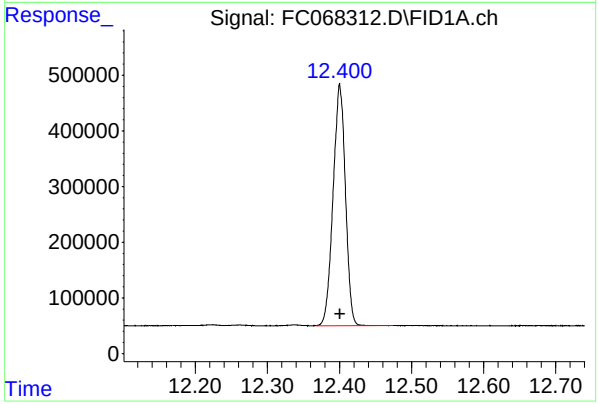

#8 n-Octadecane (C18)

R.T.: 11.094 min
Delta R.T.: 0.000 min
Response: 5053949
Conc: 36.96 ug/ml



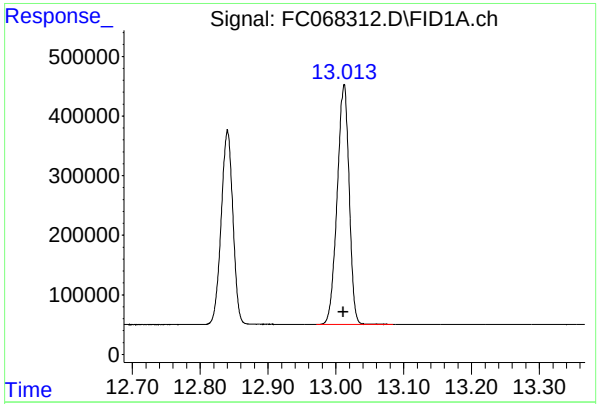

#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.400 min
Response: 0
Conc: N.D.




#10 n-Eicosane (C20)

R.T.: 12.401 min
Delta R.T.: 0.000 min
Response: 5159155
Conc: 39.60 ug/ml



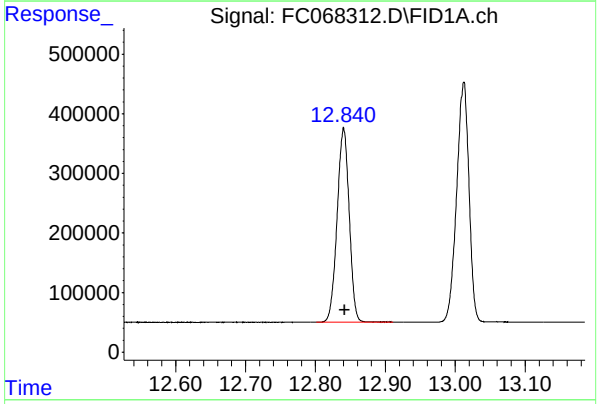

#11 n-Heneicosane (C21)

R.T.: 13.012 min
Delta R.T.: 0.000 min
Response: 4939006
Conc: 38.63 ug/ml

**Instrument :**
FID_C
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P001-CLAY-CF01-01MS

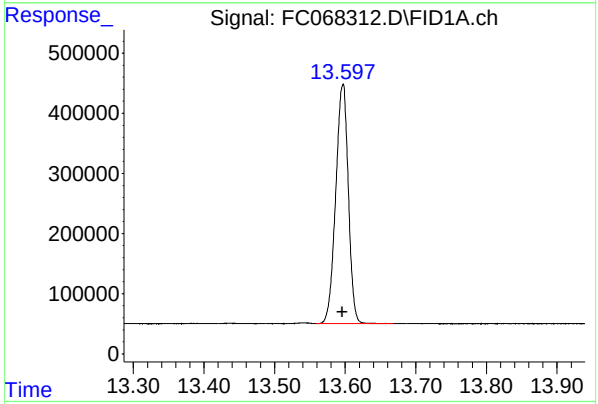
**Manual Integrations APPROVED**

Reviewed By :Yogesh Patel 03/05/2025
Supervised By :Ankita Jodhani 03/05/2025



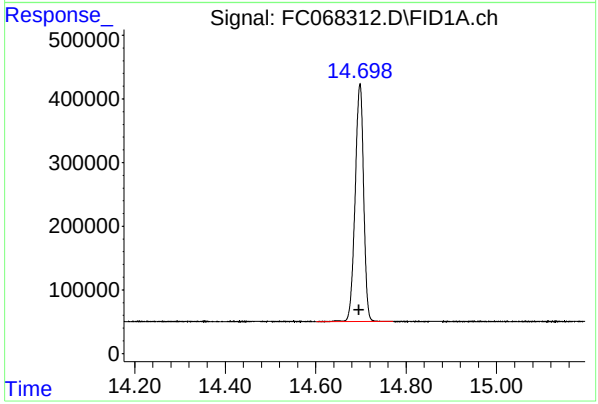

#12 1-chlorooctadecane (SURR)

R.T.: 12.840 min
Delta R.T.: -0.001 min
Response: 3904213
Conc: 34.71 ug/ml



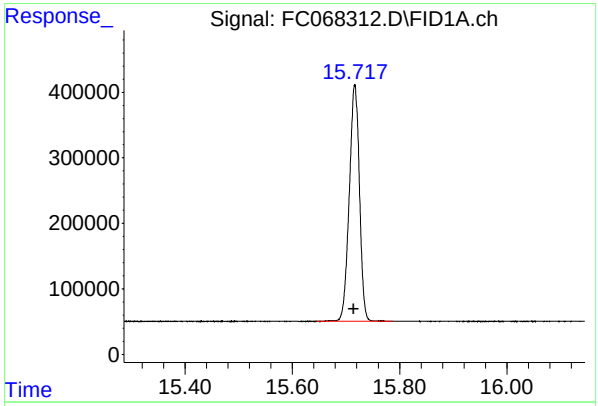

#13 n-Docosane (C22)

R.T.: 13.596 min
Delta R.T.: 0.000 min
Response: 4933624
Conc: 39.15 ug/ml




#14 n-Tetracosane (C24)

R.T.: 14.698 min
Delta R.T.: 0.002 min
Response: 4864443
Conc: 39.11 ug/ml



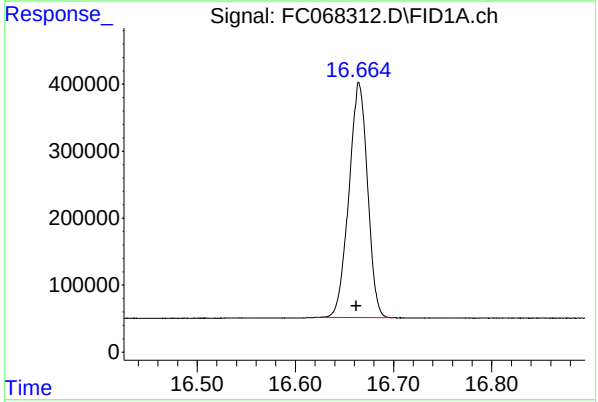

#15 n-Hexacosane (C26)

R.T.: 15.717 min
Delta R.T.: 0.003 min
Response: 4768879
Conc: 39.22 ug/ml

**Instrument :**
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**ClientSampleId :**
P001-CLAY-CF01-01MS

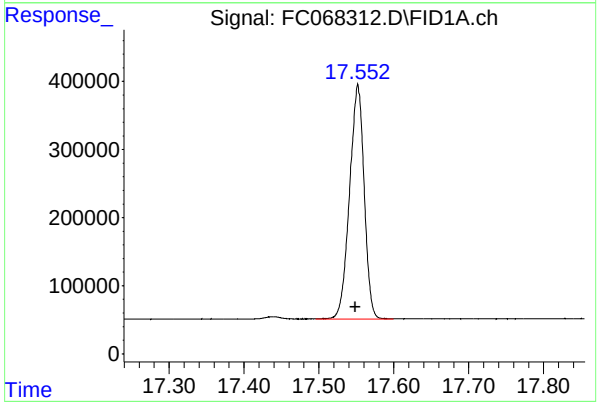
**Manual Integrations APPROVED**

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Supervised By :Ankita Jodhani 03/05/2025



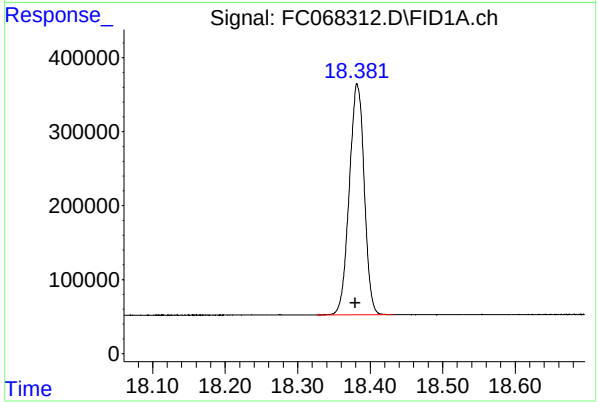

#16 n-Octacosane (C28)

R.T.: 16.665 min
Delta R.T.: 0.003 min
Response: 4622336
Conc: 38.92 ug/ml



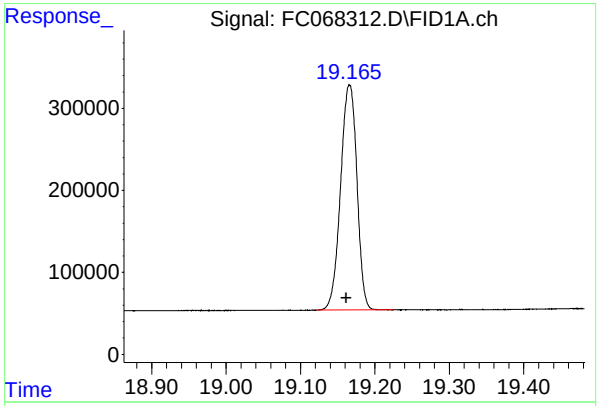

#17 n-Tricontane (C30)

R.T.: 17.552 min
Delta R.T.: 0.003 min
Response: 4660035
Conc: 38.72 ug/ml m




#18 n-Dotriacontane (C32)

R.T.: 18.381 min
Delta R.T.: 0.002 min
Response: 4477414
Conc: 38.58 ug/ml m



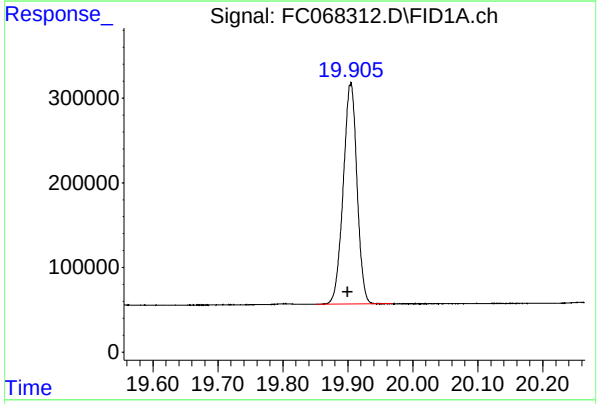

#19 n-Tetratriacontane (C34)

R.T.: 19.166 min
Delta R.T.: 0.005 min
Response: 4193800
Conc: 38.81 ug/ml

**Instrument :**
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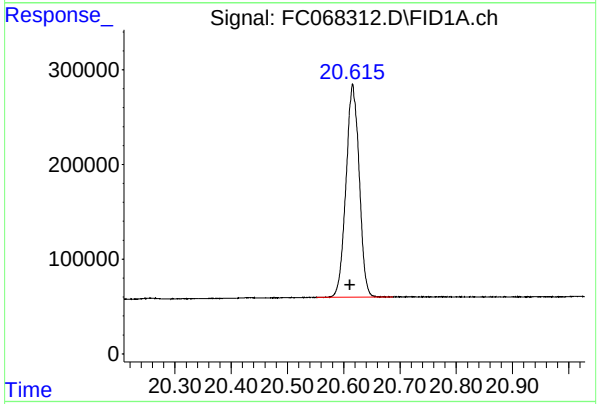
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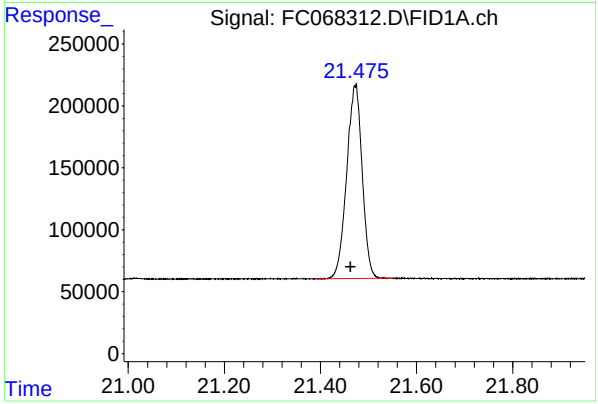

#20 n-Hexatriacontane (C36)

R.T.: 19.904 min
Delta R.T.: 0.004 min
Response: 3845962
Conc: 39.99 ug/ml




#21 n-Octatriacontane (C38)

R.T.: 20.616 min
Delta R.T.: 0.005 min
Response: 3662819
Conc: 40.74 ug/ml




#22 n-Tetracontane (C40)

R.T.: 21.473 min
Delta R.T.: 0.010 min
Response: 3506889
Conc: 40.53 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
P001-CLAY-CF01-01MS

rteres

Area Percent Report

**Manual IntegrationsAPPROVED**

Reviewed By :Yogesh Patel 03/05/2025
Supervised By :Ankita Jodhani 03/05/2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC02272
Data File : FC068312.D
Signal(s) : FID1A.ch
Acq On : 27 Feb 2025 14:03
Sample : Q1421-05
Misc :
ALS Vial : 15 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Title : GC Extractables

Signal : FID1A.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 2.374 | 2.304 | 2.403 | BV | 1748 | 16127 | 0.31% | 0.017% |
| 2 | 2.431 | 2.403 | 2.458 | PV | 7159 | 60633 | 1.17% | 0.066% |
| 3 | 2.476 | 2.458 | 2.518 | VV | 5873 | 49720 | 0.96% | 0.054% |
| 4 | 2.527 | 2.518 | 2.536 | VV | 173 | 902 | 0.02% | 0.001% |
| 5 | 2.557 | 2.536 | 2.577 | VV | 331 | 3737 | 0.07% | 0.004% |
| 6 | 2.592 | 2.577 | 2.617 | VV | 255 | 2609 | 0.05% | 0.003% |
| 7 | 2.654 | 2.617 | 2.711 | PV | 9106 | 79438 | 1.53% | 0.086% |
| 8 | 2.742 | 2.711 | 2.770 | VV | 4617 | 60571 | 1.17% | 0.066% |
| 9 | 2.788 | 2.770 | 2.821 | VV | 2454 | 25058 | 0.48% | 0.027% |
| 10 | 2.839 | 2.821 | 2.901 | VV | 1768 | 18971 | 0.37% | 0.021% |
| 11 | 2.918 | 2.901 | 2.935 | VV | 271 | 3513 | 0.07% | 0.004% |
| 12 | 2.961 | 2.935 | 3.006 | VV | 1432 | 14560 | 0.28% | 0.016% |
| 13 | 3.025 | 3.006 | 3.046 | VV | 271 | 4590 | 0.09% | 0.005% |
| 14 | 3.059 | 3.046 | 3.074 | VV | 157 | 2012 | 0.04% | 0.002% |
| 15 | 3.101 | 3.074 | 3.129 | VV | 447 | 5054 | 0.10% | 0.005% |
| 16 | 3.158 | 3.129 | 3.176 | PV | 116 | 1915 | 0.04% | 0.002% |
| 17 | 3.206 | 3.176 | 3.281 | VV | 485365 | 4036941 | 77.96% | 4.379% |
| 18 | 3.290 | 3.281 | 3.311 | VV | 321 | 5056 | 0.10% | 0.005% |
| 19 | 3.326 | 3.311 | 3.364 | VV | 460 | 8807 | 0.17% | 0.010% |
| 20 | 3.380 | 3.364 | 3.390 | VV | 275 | 3916 | 0.08% | 0.004% |
| 21 | 3.403 | 3.390 | 3.447 | VV | 380 | 6946 | 0.13% | 0.008% |
| 22 | 3.480 | 3.447 | 3.501 | VV | 436 | 8688 | 0.17% | 0.009% |
| 23 | 3.519 | 3.501 | 3.550 | VV | 415 | 7772 | 0.15% | 0.008% |
| 24 | 3.572 | 3.550 | 3.658 | VV | 271 | 6869 | 0.13% | 0.007% |
| 25 | 3.693 | 3.658 | 3.704 | VV | 361 | 4294 | 0.08% | 0.005% |
| 26 | 3.711 | 3.704 | 3.758 | VV | 269 | 5173 | 0.10% | 0.006% |
| 27 | 3.775 | 3.758 | 3.825 | VV | 352 | 6491 | 0.13% | 0.007% |
| 28 | 3.866 | 3.825 | 3.879 | VV | 647 | 8510 | 0.16% | 0.009% |
| 29 | 3.894 | 3.879 | 3.914 | VV | 1030 | 11035 | 0.21% | 0.012% |
| 30 | 3.920 | 3.914 | 3.948 | VV | 216 | 2955 | 0.06% | 0.003% |
| 31 | 3.960 | 3.948 | 3.982 | VV | 263 | 2894 | 0.06% | 0.003% |
| 32 | 4.029 | 3.982 | 4.109 | VV | 996 | 24296 | 0.47% | 0.026% |
| 33 | 4.128 | 4.109 | 4.155 | VV | 198 | 3618 | 0.07% | 0.004% |
| 34 | 4.193 | 4.155 | 4.229 | VV | 246 | 7401 | 0.14% | 0.008% |
| 35 | 4.263 | 4.229 | 4.287 | VV | 518493 | 4622022 | 89.26% | 5.014% |
| 36 | 4.301 | 4.287 | 4.346 | VV | 13718 | 144025 | 2.78% | 0.156% |

**Instrument :**
FID_C
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P001-CLAY-CF01-01MS

**Manual IntegrationsAPPROVED**

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| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 37 | 4.366 | 4.346 | 4.389 | VV | 627 | 13558 | 0.26% | 0.015% |
| 38 | 4.429 | 4.389 | 4.448 | VV | 1444 | 21668 | | |
| 39 | 4.484 | 4.448 | 4.498 | VV | 1033 | 15851 | | |
| 40 | 4.514 | 4.498 | 4.559 | VV | 1892 | 24289 | | |
| 41 | 4.586 | 4.559 | 4.595 | VV | 268 | 4760 | | |
| 42 | 4.633 | 4.595 | 4.688 | VV | 366 | 12530 | | |
| 43 | 4.712 | 4.688 | 4.774 | VV | 260 | 7700 | 0.15% | 0.008% |
| 44 | 4.812 | 4.774 | 4.842 | VV | 366 | 8280 | 0.16% | 0.009% |
| 45 | 4.891 | 4.842 | 4.928 | VV | 3997 | 52814 | 1.02% | 0.057% |
| 46 | 4.947 | 4.928 | 4.962 | VV | 783 | 8972 | 0.17% | 0.010% |
| 47 | 4.973 | 4.962 | 5.026 | VV | 341 | 6495 | 0.13% | 0.007% |
| 48 | 5.054 | 5.026 | 5.066 | VV | 229 | 2823 | 0.05% | 0.003% |
| 49 | 5.081 | 5.066 | 5.148 | VV | 255 | 6586 | 0.13% | 0.007% |
| 50 | 5.164 | 5.148 | 5.221 | VV | 217 | 5693 | 0.11% | 0.006% |
| 51 | 5.257 | 5.221 | 5.271 | VV | 227 | 3735 | 0.07% | 0.004% |
| 52 | 5.292 | 5.271 | 5.312 | VV | 1701 | 19275 | 0.37% | 0.021% |
| 53 | 5.332 | 5.312 | 5.374 | VV | 1373 | 18215 | 0.35% | 0.020% |
| 54 | 5.388 | 5.374 | 5.413 | VV | 319 | 4337 | 0.08% | 0.005% |
| 55 | 5.475 | 5.413 | 5.519 | VV | 329 | 9627 | 0.19% | 0.010% |
| 56 | 5.536 | 5.519 | 5.550 | PV | 122 | 1276 | 0.02% | 0.001% |
| 57 | 5.583 | 5.550 | 5.608 | VV | 357 | 7071 | 0.14% | 0.008% |
| 58 | 5.622 | 5.608 | 5.682 | VV | 212 | 5703 | 0.11% | 0.006% |
| 59 | 5.690 | 5.682 | 5.714 | VV | 99 | 1038 | 0.02% | 0.001% |
| 60 | 5.743 | 5.714 | 5.786 | PV | 177 | 4034 | 0.08% | 0.004% |
| 61 | 5.833 | 5.786 | 5.874 | VV | 3908 | 53480 | 1.03% | 0.058% |
| 62 | 5.888 | 5.874 | 5.911 | VV | 554 | 9264 | 0.18% | 0.010% |
| 63 | 5.929 | 5.911 | 5.953 | VV | 889 | 12468 | 0.24% | 0.014% |
| 64 | 5.990 | 5.953 | 6.034 | VV | 573 | 13235 | 0.26% | 0.014% |
| 65 | 6.063 | 6.034 | 6.091 | VV | 360 | 8300 | 0.16% | 0.009% |
| 66 | 6.115 | 6.091 | 6.131 | VV | 219 | 4382 | 0.08% | 0.005% |
| 67 | 6.149 | 6.131 | 6.224 | VV | 197 | 9347 | 0.18% | 0.010% |
| 68 | 6.271 | 6.224 | 6.338 | VV | 491757 | 4898431 | 94.59% | 5.314% |
| 69 | 6.352 | 6.338 | 6.373 | VV | 1028 | 14994 | 0.29% | 0.016% |
| 70 | 6.388 | 6.373 | 6.401 | VV | 589 | 8122 | 0.16% | 0.009% |
| 71 | 6.418 | 6.401 | 6.441 | VV | 1421 | 18621 | 0.36% | 0.020% |
| 72 | 6.452 | 6.441 | 6.469 | VV | 552 | 6521 | 0.13% | 0.007% |
| 73 | 6.491 | 6.469 | 6.530 | VV | 781 | 12996 | 0.25% | 0.014% |
| 74 | 6.543 | 6.530 | 6.574 | VV | 270 | 5099 | 0.10% | 0.006% |
| 75 | 6.586 | 6.574 | 6.614 | VV | 296 | 4930 | 0.10% | 0.005% |
| 76 | 6.627 | 6.614 | 6.647 | VV | 229 | 3874 | 0.07% | 0.004% |
| 77 | 6.664 | 6.647 | 6.694 | VV | 192 | 4640 | 0.09% | 0.005% |
| 78 | 6.710 | 6.694 | 6.743 | VV | 679 | 9690 | 0.19% | 0.011% |
| 79 | 6.762 | 6.743 | 6.797 | VV | 757 | 14502 | 0.28% | 0.016% |
| 80 | 6.812 | 6.797 | 6.855 | VV | 727 | 15074 | 0.29% | 0.016% |
| 81 | 6.888 | 6.855 | 6.962 | VV | 2003 | 37189 | 0.72% | 0.040% |
| 82 | 6.992 | 6.962 | 7.021 | VV | 342 | 7087 | 0.14% | 0.008% |
| 83 | 7.049 | 7.021 | 7.081 | VV | 2523 | 29467 | 0.57% | 0.032% |
| 84 | 7.111 | 7.081 | 7.140 | VV | 362 | 8550 | 0.17% | 0.009% |
| 85 | 7.156 | 7.140 | 7.168 | VV | 407 | 5069 | 0.10% | 0.005% |
| 86 | 7.190 | 7.168 | 7.224 | VV | 2059 | 25937 | 0.50% | 0.028% |
| 87 | 7.252 | 7.224 | 7.267 | VV | 436 | 6870 | 0.13% | 0.007% |
| 88 | 7.279 | 7.267 | 7.319 | VV | 471 | 6265 | 0.12% | 0.007% |
| 89 | 7.344 | 7.319 | 7.388 | VV | 167 | 4399 | 0.08% | 0.005% |

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rteres

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 90 | 7.402 | 7.388 | 7.415 | VV | 120 | 1440 | 0.03% | 0.002% |
| 91 | 7.449 | 7.415 | 7.490 | VV | 888 | 11622 | | |
| 92 | 7.544 | 7.490 | 7.580 | VV | 213 | 6477 | | |
| 93 | 7.614 | 7.580 | 7.632 | VV | 247 | 5508 | | |
| 94 | 7.644 | 7.632 | 7.653 | VV | 162 | 1715 | | |
| 95 | 7.669 | 7.653 | 7.693 | VV | 177 | 2768 | | |
| 96 | 7.712 | 7.693 | 7.726 | VV | 269 | 2671 | 0.05% | 0.003% |
| 97 | 7.754 | 7.726 | 7.779 | VV | 1061 | 13500 | 0.26% | 0.015% |
| 98 | 7.810 | 7.779 | 7.829 | VV | 1041 | 12835 | 0.25% | 0.014% |
| 99 | 7.847 | 7.829 | 7.894 | VV | 263 | 5444 | 0.11% | 0.006% |
| 100 | 7.911 | 7.894 | 7.938 | VV | 225 | 3065 | 0.06% | 0.003% |
| 101 | 7.965 | 7.938 | 7.990 | VV | 625 | 8725 | 0.17% | 0.009% |
| 102 | 8.000 | 7.990 | 8.017 | VV | 247 | 3063 | 0.06% | 0.003% |
| 103 | 8.060 | 8.017 | 8.132 | VV | 481407 | 4984149 | 96.25% | 5.407% |
| 104 | 8.153 | 8.132 | 8.188 | VV | 741 | 18611 | 0.36% | 0.020% |
| 105 | 8.204 | 8.188 | 8.225 | VV | 454 | 7630 | 0.15% | 0.008% |
| 106 | 8.250 | 8.225 | 8.271 | VV | 494 | 8273 | 0.16% | 0.009% |
| 107 | 8.289 | 8.271 | 8.327 | VV | 554 | 7674 | 0.15% | 0.008% |
| 108 | 8.355 | 8.327 | 8.438 | VV | 12737 | 197503 | 3.81% | 0.214% |
| 109 | 8.449 | 8.438 | 8.491 | VV | 811 | 18084 | 0.35% | 0.020% |
| 110 | 8.513 | 8.491 | 8.538 | VV | 593 | 12763 | 0.25% | 0.014% |
| 111 | 8.546 | 8.538 | 8.575 | VV | 501 | 8861 | 0.17% | 0.010% |
| 112 | 8.597 | 8.575 | 8.641 | VV | 766 | 18246 | 0.35% | 0.020% |
| 113 | 8.654 | 8.641 | 8.680 | VV | 285 | 4419 | 0.09% | 0.005% |
| 114 | 8.711 | 8.680 | 8.725 | PV | 329 | 4256 | 0.08% | 0.005% |
| 115 | 8.778 | 8.725 | 8.798 | VV | 2003 | 27853 | 0.54% | 0.030% |
| 116 | 8.813 | 8.798 | 8.857 | VV | 896 | 20283 | 0.39% | 0.022% |
| 117 | 8.891 | 8.857 | 8.941 | VV | 1934 | 38870 | 0.75% | 0.042% |
| 118 | 8.965 | 8.941 | 8.987 | VV | 389 | 6286 | 0.12% | 0.007% |
| 119 | 9.012 | 8.987 | 9.037 | VV | 319 | 4629 | 0.09% | 0.005% |
| 120 | 9.118 | 9.037 | 9.131 | VV | 327 | 9472 | 0.18% | 0.010% |
| 121 | 9.176 | 9.131 | 9.214 | VV | 673 | 15128 | 0.29% | 0.016% |
| 122 | 9.246 | 9.214 | 9.275 | VV | 1176 | 20556 | 0.40% | 0.022% |
| 123 | 9.295 | 9.275 | 9.328 | VV | 756 | 11493 | 0.22% | 0.012% |
| 124 | 9.339 | 9.328 | 9.361 | VV | 232 | 3484 | 0.07% | 0.004% |
| 125 | 9.389 | 9.361 | 9.410 | VV | 731 | 11839 | 0.23% | 0.013% |
| 126 | 9.434 | 9.410 | 9.474 | VV | 2638 | 31711 | 0.61% | 0.034% |
| 127 | 9.491 | 9.474 | 9.508 | VV | 305 | 3539 | 0.07% | 0.004% |
| 128 | 9.527 | 9.508 | 9.558 | VV | 264 | 5191 | 0.10% | 0.006% |
| 129 | 9.575 | 9.558 | 9.614 | VV | 685 | 14052 | 0.27% | 0.015% |
| 130 | 9.656 | 9.614 | 9.769 | VV | 459123 | 4988173 | 96.33% | 5.411% |
| 131 | 9.802 | 9.769 | 9.818 | VV | 395 | 10038 | 0.19% | 0.011% |
| 132 | 9.826 | 9.818 | 9.861 | VV | 311 | 4409 | 0.09% | 0.005% |
| 133 | 9.881 | 9.861 | 9.890 | VV | 145 | 1865 | 0.04% | 0.002% |
| 134 | 9.931 | 9.890 | 9.947 | VV | 214 | 5124 | 0.10% | 0.006% |
| 135 | 9.972 | 9.947 | 9.991 | VV | 393 | 6167 | 0.12% | 0.007% |
| 136 | 10.046 | 9.991 | 10.063 | VV | 413 | 11241 | 0.22% | 0.012% |
| 137 | 10.082 | 10.063 | 10.118 | VV | 289 | 6536 | 0.13% | 0.007% |
| 138 | 10.132 | 10.118 | 10.179 | VV | 318 | 7817 | 0.15% | 0.008% |
| 139 | 10.187 | 10.179 | 10.225 | VV | 150 | 3750 | 0.07% | 0.004% |
| 140 | 10.251 | 10.225 | 10.264 | VV | 338 | 5771 | 0.11% | 0.006% |
| 141 | 10.289 | 10.264 | 10.306 | VV | 308 | 5907 | 0.11% | 0.006% |

**Manual IntegrationsAPPROVED**

Reviewed By :Yogesh Patel 03/05/2025
Supervised By :Ankita Jodhani 03/05/2025

**Instrument :**
FID_C
**ClientSampleId :**
P001-CLAY-CF01-01MS

**Manual IntegrationsAPPROVED**

Reviewed By :Yogesh Patel 03/05/2025
Supervised By :Ankita Jodhani 03/05/2025

rteres

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 142 | 10.325 | 10.306 | 10.353 | VV | 519 | 9751 | 0.19% | 0.011% |
| 143 | 10.393 | 10.353 | 10.424 | VV | 624 | 15581 | | |
| 144 | 10.444 | 10.424 | 10.458 | VV | 354 | 5571 | | |
| 145 | 10.477 | 10.458 | 10.490 | VV | 437 | 6527 | | |
| 146 | 10.517 | 10.490 | 10.562 | VV | 1025 | 19444 | | |
| 147 | 10.578 | 10.562 | 10.589 | VV | 218 | 3058 | | |
| 148 | 10.607 | 10.589 | 10.633 | VV | 253 | 4053 | 0.08% | 0.004% |
| 149 | 10.645 | 10.633 | 10.668 | VV | 151 | 2188 | 0.04% | 0.002% |
| 150 | 10.675 | 10.668 | 10.687 | VV | 183 | 1475 | 0.03% | 0.002% |
| 151 | 10.713 | 10.687 | 10.736 | VV | 434 | 7691 | 0.15% | 0.008% |
| 152 | 10.761 | 10.736 | 10.794 | VV | 649 | 10712 | 0.21% | 0.012% |
| 153 | 10.811 | 10.794 | 10.830 | VV | 455 | 6860 | 0.13% | 0.007% |
| 154 | 10.844 | 10.830 | 10.859 | VV | 283 | 3578 | 0.07% | 0.004% |
| 155 | 10.895 | 10.859 | 10.937 | VV | 3668 | 44065 | 0.85% | 0.048% |
| 156 | 10.947 | 10.937 | 10.963 | PV | 96 | 1107 | 0.02% | 0.001% |
| 157 | 10.976 | 10.963 | 10.996 | VV | 89 | 1303 | 0.03% | 0.001% |
| 158 | 11.023 | 10.996 | 11.054 | VV | 1875 | 24622 | 0.48% | 0.027% |
| 159 | 11.094 | 11.054 | 11.171 | VV | 432578 | 5073932 | 97.98% | 5.504% |
| 160 | 11.185 | 11.171 | 11.274 | VV | 738 | 16970 | 0.33% | 0.018% |
| 161 | 11.319 | 11.274 | 11.359 | VV | 187 | 5013 | 0.10% | 0.005% |
| 162 | 11.400 | 11.359 | 11.428 | VV | 283 | 7366 | 0.14% | 0.008% |
| 163 | 11.443 | 11.428 | 11.457 | VV | 280 | 3696 | 0.07% | 0.004% |
| 164 | 11.478 | 11.457 | 11.511 | VV | 434 | 9039 | 0.17% | 0.010% |
| 165 | 11.551 | 11.511 | 11.594 | VV | 392 | 12553 | 0.24% | 0.014% |
| 166 | 11.655 | 11.594 | 11.668 | VV | 254 | 6455 | 0.12% | 0.007% |
| 167 | 11.753 | 11.668 | 11.781 | VV | 623 | 24396 | 0.47% | 0.026% |
| 168 | 11.806 | 11.781 | 11.843 | VV | 388 | 9161 | 0.18% | 0.010% |
| 169 | 11.860 | 11.843 | 11.871 | VV | 227 | 2746 | 0.05% | 0.003% |
| 170 | 11.892 | 11.871 | 11.911 | VV | 415 | 6647 | 0.13% | 0.007% |
| 171 | 11.915 | 11.911 | 11.944 | VV | 405 | 4789 | 0.09% | 0.005% |
| 172 | 11.975 | 11.944 | 12.011 | VV | 654 | 15711 | 0.30% | 0.017% |
| 173 | 12.050 | 12.011 | 12.081 | VV | 429 | 9974 | 0.19% | 0.011% |
| 174 | 12.094 | 12.081 | 12.128 | VV | 269 | 5215 | 0.10% | 0.006% |
| 175 | 12.223 | 12.128 | 12.242 | VV | 1889 | 39283 | 0.76% | 0.043% |
| 176 | 12.260 | 12.242 | 12.291 | VV | 1375 | 20619 | 0.40% | 0.022% |
| 177 | 12.338 | 12.291 | 12.361 | VV | 1548 | 21414 | 0.41% | 0.023% |
| 178 | 12.401 | 12.361 | 12.525 | VV | 430831 | 5178431 | 100.00% | 5.618% |
| 179 | 12.533 | 12.525 | 12.581 | VV | 195 | 3696 | 0.07% | 0.004% |
| 180 | 12.590 | 12.581 | 12.604 | VV | 95 | 763 | 0.01% | 0.001% |
| 181 | 12.612 | 12.604 | 12.630 | VV | 73 | 707 | 0.01% | 0.001% |
| 182 | 12.677 | 12.630 | 12.701 | VV | 226 | 5793 | 0.11% | 0.006% |
| 183 | 12.715 | 12.701 | 12.738 | VV | 160 | 2199 | 0.04% | 0.002% |
| 184 | 12.772 | 12.738 | 12.784 | VV | 216 | 4196 | 0.08% | 0.005% |
| 185 | 12.840 | 12.784 | 12.931 | VV | 326171 | 3932567 | 75.94% | 4.266% |
| 186 | 12.954 | 12.931 | 12.970 | VV | 449 | 8575 | 0.17% | 0.009% |
| 187 | 13.012 | 12.970 | 13.103 | VV | 397637 | 4967083 | 95.92% | 5.388% |
| 188 | 13.123 | 13.103 | 13.178 | VV | 401 | 11499 | 0.22% | 0.012% |
| 189 | 13.222 | 13.178 | 13.240 | VV | 331 | 10025 | 0.19% | 0.011% |
| 190 | 13.277 | 13.240 | 13.331 | VV | 423 | 14984 | 0.29% | 0.016% |
| 191 | 13.354 | 13.331 | 13.366 | VV | 199 | 3744 | 0.07% | 0.004% |
| 192 | 13.386 | 13.366 | 13.410 | VV | 535 | 8557 | 0.17% | 0.009% |
| 193 | 13.436 | 13.410 | 13.508 | VV | 817 | 18822 | 0.36% | 0.020% |
| 194 | 13.541 | 13.508 | 13.559 | VV | 1470 | 21374 | 0.41% | 0.023% |

**Instrument :**
FID_C
**ClientSampleId :**
P001-CLAY-CF01-01MS

**Manual IntegrationsAPPROVED**

Reviewed By :Yogesh Patel 03/05/2025
Supervised By :Ankita Jodhani 03/05/2025

rteres

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 195 | 13.596 | 13.559 | 13.704 | VV | 402601 | 4954203 | 95.67% | 5.374% |
| 196 | 13.720 | 13.704 | 13.757 | VV | 193 | 3714 | | |
| 197 | 13.772 | 13.757 | 13.784 | VV | 103 | 1180 | | |
| 198 | 13.790 | 13.784 | 13.834 | VV | 146 | 3075 | | |
| 199 | 13.850 | 13.834 | 13.875 | VV | 172 | 2444 | | |
| 200 | 13.891 | 13.875 | 13.908 | VV | 109 | 1703 | | |
| 201 | 13.919 | 13.908 | 13.944 | VV | 117 | 2177 | 0.04% | 0.002% |
| 202 | 13.955 | 13.944 | 13.965 | VV | 143 | 1310 | 0.03% | 0.001% |
| 203 | 13.976 | 13.965 | 13.993 | VV | 141 | 1582 | 0.03% | 0.002% |
| 204 | 14.030 | 13.993 | 14.075 | VV | 1149 | 20408 | 0.39% | 0.022% |
| 205 | 14.086 | 14.075 | 14.136 | VV | 195 | 6418 | 0.12% | 0.007% |
| 206 | 14.154 | 14.136 | 14.192 | VV | 356 | 7473 | 0.14% | 0.008% |
| 207 | 14.232 | 14.192 | 14.241 | VV | 233 | 5198 | 0.10% | 0.006% |
| 208 | 14.279 | 14.241 | 14.291 | VV | 222 | 6024 | 0.12% | 0.007% |
| 209 | 14.302 | 14.291 | 14.393 | VV | 257 | 11155 | 0.22% | 0.012% |
| 210 | 14.468 | 14.393 | 14.486 | VV | 302 | 11162 | 0.22% | 0.012% |
| 211 | 14.499 | 14.486 | 14.548 | VV | 315 | 7750 | 0.15% | 0.008% |
| 212 | 14.552 | 14.548 | 14.601 | VV | 274 | 4357 | 0.08% | 0.005% |
| 213 | 14.650 | 14.601 | 14.660 | PV | 1467 | 19318 | 0.37% | 0.021% |
| 214 | 14.698 | 14.660 | 14.831 | VV | 373348 | 4865463 | 93.96% | 5.278% |
| 215 | 14.868 | 14.831 | 14.908 | VV | 350 | 9188 | 0.18% | 0.010% |
| 216 | 14.915 | 14.908 | 14.964 | VV | 155 | 4070 | 0.08% | 0.004% |
| 217 | 14.976 | 14.964 | 15.031 | VV | 147 | 3386 | 0.07% | 0.004% |
| 218 | 15.097 | 15.031 | 15.114 | VV | 189 | 4881 | 0.09% | 0.005% |
| 219 | 15.174 | 15.114 | 15.183 | VV | 155 | 4575 | 0.09% | 0.005% |
| 220 | 15.215 | 15.183 | 15.281 | VV | 747 | 15252 | 0.29% | 0.017% |
| 221 | 15.306 | 15.281 | 15.341 | PV | 144 | 3855 | 0.07% | 0.004% |
| 222 | 15.350 | 15.341 | 15.376 | VV | 189 | 2739 | 0.05% | 0.003% |
| 223 | 15.410 | 15.376 | 15.431 | VV | 216 | 5188 | 0.10% | 0.006% |
| 224 | 15.454 | 15.431 | 15.478 | VV | 141 | 3349 | 0.06% | 0.004% |
| 225 | 15.565 | 15.478 | 15.628 | VV | 238 | 14551 | 0.28% | 0.016% |
| 226 | 15.717 | 15.628 | 15.815 | VV | 358885 | 4786311 | 92.43% | 5.192% |
| 227 | 15.825 | 15.815 | 15.858 | VV | 177 | 3192 | 0.06% | 0.003% |
| 228 | 15.877 | 15.858 | 15.990 | VV | 149 | 6220 | 0.12% | 0.007% |
| 229 | 16.043 | 15.990 | 16.073 | PV | 181 | 3163 | 0.06% | 0.003% |
| 230 | 16.091 | 16.073 | 16.108 | VV | 109 | 1417 | 0.03% | 0.002% |
| 231 | 16.126 | 16.108 | 16.138 | PV | 106 | 1344 | 0.03% | 0.001% |
| 232 | 16.159 | 16.138 | 16.171 | VV | 192 | 2599 | 0.05% | 0.003% |
| 233 | 16.196 | 16.171 | 16.281 | VV | 1178 | 20080 | 0.39% | 0.022% |
| 234 | 16.284 | 16.281 | 16.299 | VV | 141 | 726 | 0.01% | 0.001% |
| 235 | 16.409 | 16.299 | 16.458 | VV | 179 | 8678 | 0.17% | 0.009% |
| 236 | 16.468 | 16.458 | 16.476 | PV | 78 | 585 | 0.01% | 0.001% |
| 237 | 16.544 | 16.476 | 16.588 | VV | 495 | 14701 | 0.28% | 0.016% |
| 238 | 16.665 | 16.588 | 16.735 | VV | 351066 | 4686952 | 90.51% | 5.084% |
| 239 | 16.744 | 16.735 | 16.784 | VV | 257 | 5595 | 0.11% | 0.006% |
| 240 | 16.817 | 16.784 | 16.881 | VV | 155 | 4768 | 0.09% | 0.005% |
| 241 | 16.914 | 16.881 | 16.924 | PV | 70 | 1173 | 0.02% | 0.001% |
| 242 | 16.958 | 16.924 | 16.990 | VV | 120 | 2410 | 0.05% | 0.003% |
| 243 | 16.999 | 16.990 | 17.048 | VV | 93 | 773 | 0.01% | 0.001% |
| 244 | 17.113 | 17.048 | 17.172 | VV | 1166 | 19684 | 0.38% | 0.021% |
| 245 | 17.223 | 17.172 | 17.238 | VV | 91 | 2457 | 0.05% | 0.003% |
| 246 | 17.268 | 17.238 | 17.286 | PV | 108 | 1301 | 0.03% | 0.001% |

**Instrument :**
FID_C
**ClientSampleId :**
P001-CLAY-CF01-01MS

**Manual IntegrationsAPPROVED**

Reviewed By :Yogesh Patel 03/05/2025
Supervised By :Ankita Jodhani 03/05/2025

| | | | | | rteres | | | |
|---|---|---|---|---|---|---|---|---|
| 247 | 17.343 | 17.286 | 17.371 | VV | 162 | 4292 | 0.08% | 0.005% |
| 248 | 17.381 | 17.371 | 17.388 | PV | 55 | 373 | | |
| 249 | 17.439 | 17.388 | 17.480 | VV | 3302 | 51194 | | |
| 250 | 17.552 | 17.480 | 17.614 | VV | 341017 | 4668286 | 90 | |
| 251 | 17.625 | 17.614 | 17.651 | VV | 228 | 4143 | | |
| 252 | 17.709 | 17.651 | 17.724 | VV | 173 | 4751 | | |
| 253 | 17.740 | 17.724 | 17.750 | VV | 121 | 936 | 0.02% | 0.001% |
| 254 | 17.762 | 17.750 | 17.783 | PV | 97 | 893 | 0.02% | 0.001% |
| 255 | 17.829 | 17.783 | 17.838 | VV | 216 | 3311 | 0.06% | 0.004% |
| 256 | 17.848 | 17.838 | 17.886 | VV | 178 | 2932 | 0.06% | 0.003% |
| 257 | 17.901 | 17.886 | 17.917 | PV | 93 | 1095 | 0.02% | 0.001% |
| 258 | 17.970 | 17.917 | 18.038 | PV | 1469 | 22722 | 0.44% | 0.025% |
| 259 | 18.238 | 18.038 | 18.256 | PV | 227 | 7492 | 0.14% | 0.008% |
| 260 | 18.276 | 18.256 | 18.314 | VV | 223 | 4206 | 0.08% | 0.005% |
| 261 | 18.382 | 18.314 | 18.494 | VV | 313029 | 4486901 | 86.65% | 4.867% |
| 262 | 18.503 | 18.494 | 18.515 | VV | 106 | 1077 | 0.02% | 0.001% |
| 263 | 18.554 | 18.515 | 18.595 | VV | 173 | 4566 | 0.09% | 0.005% |
| 264 | 18.644 | 18.595 | 18.664 | PV | 113 | 4418 | 0.09% | 0.005% |
| 265 | 18.689 | 18.664 | 18.701 | VV | 124 | 1503 | 0.03% | 0.002% |
| 266 | 18.776 | 18.701 | 18.848 | PV | 1786 | 32216 | 0.62% | 0.035% |
| 267 | 18.915 | 18.848 | 18.924 | VV | 154 | 4087 | 0.08% | 0.004% |
| 268 | 18.952 | 18.924 | 18.968 | VV | 278 | 3940 | 0.08% | 0.004% |
| 269 | 18.974 | 18.968 | 18.993 | VV | 113 | 1495 | 0.03% | 0.002% |
| 270 | 19.166 | 18.993 | 19.238 | VV | 275616 | 4233274 | 81.75% | 4.592% |
| 271 | 19.248 | 19.238 | 19.271 | VV | 521 | 8838 | 0.17% | 0.010% |
| 272 | 19.280 | 19.271 | 19.298 | VV | 390 | 5119 | 0.10% | 0.006% |
| 273 | 19.318 | 19.298 | 19.341 | VV | 511 | 10296 | 0.20% | 0.011% |
| 274 | 19.473 | 19.341 | 19.499 | VV | 1426 | 82942 | 1.60% | 0.090% |
| 275 | 19.538 | 19.499 | 19.576 | VV | 1935 | 58998 | 1.14% | 0.064% |
| 276 | 19.589 | 19.576 | 19.627 | VV | 877 | 23640 | 0.46% | 0.026% |
| 277 | 19.718 | 19.627 | 19.737 | VV | 995 | 52925 | 1.02% | 0.057% |
| 278 | 19.804 | 19.737 | 19.828 | VV | 1950 | 71001 | 1.37% | 0.077% |
| 279 | 19.904 | 19.828 | 19.950 | VV | 262249 | 3948972 | 76.26% | 4.284% |
| 280 | 19.961 | 19.950 | 20.013 | VV | 1707 | 61002 | 1.18% | 0.066% |
| 281 | 20.257 | 20.013 | 20.294 | VV | 2678 | 289164 | 5.58% | 0.314% |
| 282 | 20.433 | 20.294 | 20.468 | VV | 2779 | 230459 | 4.45% | 0.250% |
| 283 | 20.616 | 20.468 | 20.689 | VV | 224161 | 4037873 | 77.97% | 4.380% |
| 284 | 20.718 | 20.689 | 20.736 | VV | 3114 | 86774 | 1.68% | 0.094% |
| 285 | 20.777 | 20.736 | 20.890 | VV | 2963 | 258321 | 4.99% | 0.280% |
| 286 | 20.902 | 20.890 | 20.918 | VV | 2688 | 43935 | 0.85% | 0.048% |
| 287 | 20.954 | 20.918 | 20.981 | VV | 2680 | 97561 | 1.88% | 0.106% |
| 288 | 21.015 | 20.981 | 21.061 | VV | 2903 | 124092 | 2.40% | 0.135% |
| 289 | 21.122 | 21.061 | 21.153 | VV | 2311 | 125468 | 2.42% | 0.136% |
| 290 | 21.181 | 21.153 | 21.204 | VV | 2196 | 67281 | 1.30% | 0.073% |
| 291 | 21.265 | 21.204 | 21.304 | VV | 2085 | 123953 | 2.39% | 0.134% |
| 292 | 21.348 | 21.304 | 21.387 | VV | 1997 | 95000 | 1.83% | 0.103% |
| 293 | 21.472 | 21.387 | 21.711 | VV | 158612 | 3834078 | 74.04% | 4.159% |
| 294 | 21.723 | 21.711 | 21.774 | VV | 1307 | 46971 | 0.91% | 0.051% |
| 295 | 21.783 | 21.774 | 21.848 | VV | 1227 | 45738 | 0.88% | 0.050% |
| 296 | 21.862 | 21.848 | 21.931 | VV | 920 | 41007 | 0.79% | 0.044% |
| 297 | 21.991 | 21.931 | 22.219 | VV | 794 | 72030 | 1.39% | 0.078% |
| | | | Sum of corrected areas: | | | 92183135 | | |

rteres

Aliphatic EPH 021125.M Fri Feb 28 01:14:34 2025

**Instrument :**
FID_C
**ClientSampleId :**
P001-CLAY-CF01-01MS

**Manual IntegrationsAPPROVED**

Reviewed By :Yogesh Patel 03/05/2025
Supervised By :Ankita Jodhani 03/05/2025

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Weston Solutions, Inc. | Date Collected: | 02/24/25 |
| Project: | RFP 905 | Date Received: | 02/24/25 |
| Client Sample ID: | P001-CLAY-CF01-01MS | SDG No.: | Q1421 |
| Lab Sample ID: | Q1421-05 | Matrix: | Water |
| Analytical Method: | NJEPH | % Solid: | 0 |
| Sample Wt/Vol: | 1000 Units: mL | Final Vol: | 2000 uL |
| Soil Aliquot Vol: | uL | Test: | EPH |
| Prep Method : | SW3510 | | |

| File ID : | Dilution: | Prep Date : | Date Analyzed : | Prep Batch ID |
|---|---|---|---|---|
| FD049121.D | 1 | 02/26/25 | 02/27/25 | PB166883 |

| CAS Number | Parameter | | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | |
| Aromatic C10-C12 | Aromatic C10-C12 | | 188 | | 3.32 | 20.0 | ug/l |
| Aromatic C12-C16 | Aromatic C12-C16 | | 304 | | 3.69 | 30.0 | ug/l |
| Aromatic C16-C21 | Aromatic C16-C21 | | 542 | | 12.7 | 50.0 | ug/l |
| Aromatic C21-C36 | Aromatic C21-C36 | | 888 | | 25.2 | 80.0 | ug/l |
| **SURROGATES** | | | | | | | |
| 580-13-2 | 2-Bromonaphthalene (SURR) | | 52.8 | | 40 - 140 | 106% | SPK: 50 |
| 321-60-8 | 2-Flurobiphenyl (SURR) | | 53.7 | | 40 - 140 | 107% | SPK: 50 |
| 84-15-1 | ortho-Terphenyl (SURR) | | 45.3 | | 40 - 140 | 91% | SPK: 50 |

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

# Quantitation Report For Aromatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | Q1421-05 | Acq On: | 27 Feb 2025 14:03 |
| Client Sample ID: | P001-CLAY-CF01-01MS | Operator: | YP/AJ |
| Data file: | FD049121.D | Misc: | |
| Instrument: | FID_D | ALS Vial: | 65 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aromatic C10-C12 | 4.076 | 5.794 | 14983565 | 94.224 | 200 | ug/ml |
| Aromatic C12-C16 | 5.795 | 8.397 | 24474718 | 152.077 | 300 | ug/ml |
| Aromatic C16-C21 | 8.398 | 12.661 | 41596172 | 271.233 | 500 | ug/ml |
| Aromatic C21-C36 | 12.662 | 18.071 | 63583513 | 444.283 | 800 | ug/ml |
| Aromatic EPH | 4.076 | 18.071 | 144637968 | 961.818 | | ug/ml |
| 2-Bromonaphthalene (SURR) | 7.352 | 7.352 | 7562187 | 52.84 | | ug/ml |
| 2-Flurobiphenyl (SURR) | 8.203 | 8.203 | 4724292 | 53.74 | | ug/ml |
| ortho-Terphenyl (SURR) | 11.238 | 11.238 | 7326185 | 45.29 | | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022725AR\
Data File : FD049121.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2025 14:03
Operator : YP/AJ
Sample : Q1421-05
Misc :
ALS Vial : 65 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF01-01MS

Integration File: autoint1.e
Quant Time: Feb 28 01:27:30 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

| | Compound | R.T. | Response | Conc Units |
|---|---|---|---|---|
| | **System Monitoring Compounds** | | | |
| 4) | S 2-Bromonaphthalene (S... | 7.352 | 7562187 | 52.842 ug/ml |
| | Spiked Amount 50.000 | | Recovery = 105.68% | |
| 6) | S 2-Flurobiphenyl (SURR) | 8.203 | 4724292 | 53.739 ug/ml |
| | Spiked Amount 50.000 Range 0 - 131 | | Recovery = 107.48% | |
| 11) | S ortho-Terphenyl (SURR) | 11.238 | 7326185 | 45.286 ug/ml |
| | Spiked Amount 50.000 | | Recovery = 90.57% | |
| | **Target Compounds** | | | |
| 1) | T 1,2,3-Trimethylbenzen... | 4.179 | 6576701 | 41.297 ug/ml |
| 2) | T Naphthalene (C11.7) | 5.694 | 6945799 | 43.743 ug/ml |
| 3) | T 2-Methylnaphthalene (... | 6.739 | 6668008 | 42.828 ug/ml |
| 5) | T Acenaphthylene (C15.06) | 8.005 | 7237623 | 44.510 ug/ml |
| 7) | T Acenaphthene (C15.5) | 8.300 | 7717519 | 46.913 ug/ml |
| 8) | T Flouorene (C16.55) | 9.078 | 7323644 | 46.455 ug/ml |
| 9) | T Phenanthrene (C19.36) | 10.466 | 7113700 | 47.204 ug/ml |
| 10) | T Anthracene (C19.43) | 10.542 | 7082565 | 46.896 ug/ml |
| 12) | T Fluoranthene (C21.85) | 12.270 | 7159819 | 46.397 ug/ml |
| 13) | T Pyrene (C20.8) | 12.564 | 7060627 | 45.831 ug/ml |
| 14) | T Benzo[a]anthracene (C... | 14.435 | 6445076 | 49.053 ug/ml |
| 15) | T Chrysene (C27.41) | 14.476 | 6362968 | 39.354 ug/ml |
| 16) | T benzo[b]fluoranthene ... | 15.985 | 6392023 | 46.456 ug/ml |
| 17) | T Bnezo[k]fluoranthene ... | 16.017 | 6501603 | 41.164 ug/ml |
| 18) | T Benzo[a]pyrene (C31.34) | 16.359 | 6186282 | 45.576 ug/ml |
| 19) | T Indeno[1,2,3-cd]pyren... | 17.728 | 5704377 | 52.201 ug/ml |
| 20) | T Dibenz[a,h]anthracene... | 17.762 | 6408761 | 41.310 ug/ml |
| 21) | T Benzo[g,h,i]perylene ... | 17.977 | 6190558 | 42.708 ug/ml |

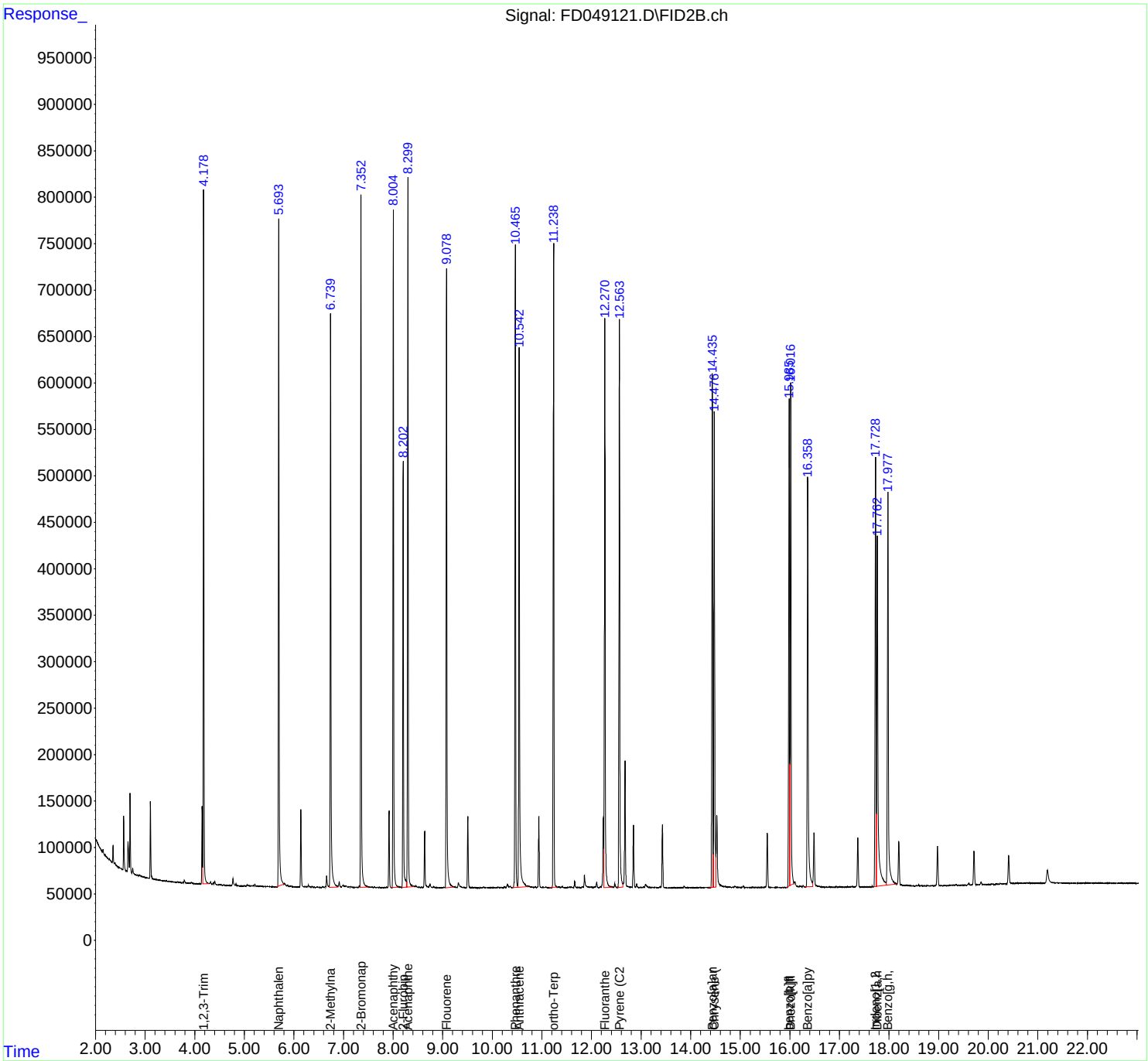
(f)=RT Delta > 1/2 Window (m)=manual int.

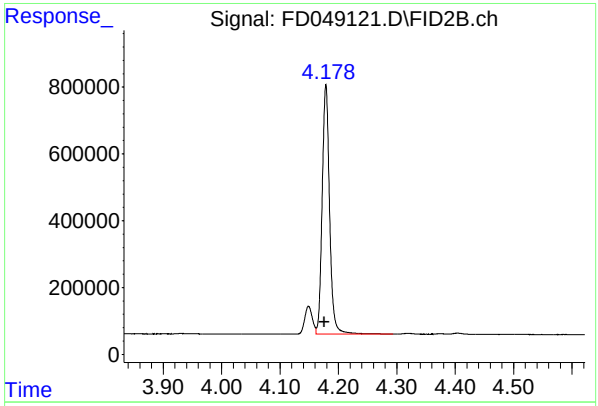
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022725AR\
Data File : FD049121.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2025 14:03
Operator : YP/AJ
Sample : Q1421-05
Misc :
ALS Vial : 65 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF01-01MS

Integration File: autoint1.e
Quant Time: Feb 28 01:27:30 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

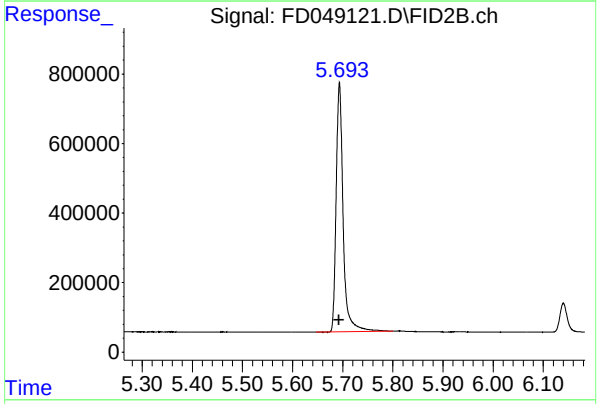





#1 1,2,3-Trimethylbenzene (C10.1)

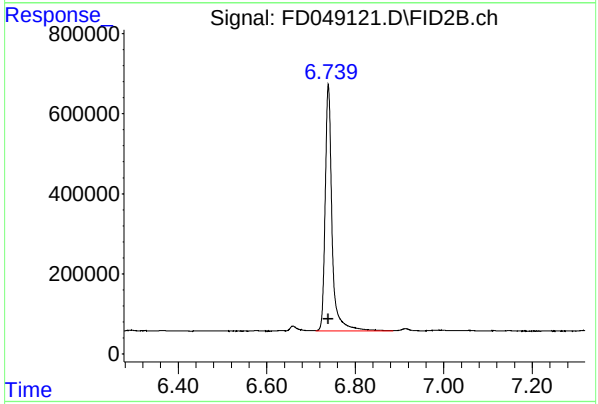
R.T.: 4.179 min
Delta R.T.: 0.003 min
Response: 6576701
Conc: 41.30 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF01-01MS



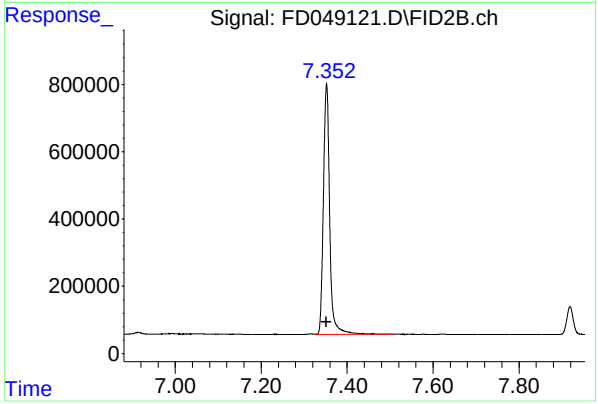

#2 Naphthalene (C11.7)

R.T.: 5.694 min
Delta R.T.: 0.000 min
Response: 6945799
Conc: 43.74 ug/ml



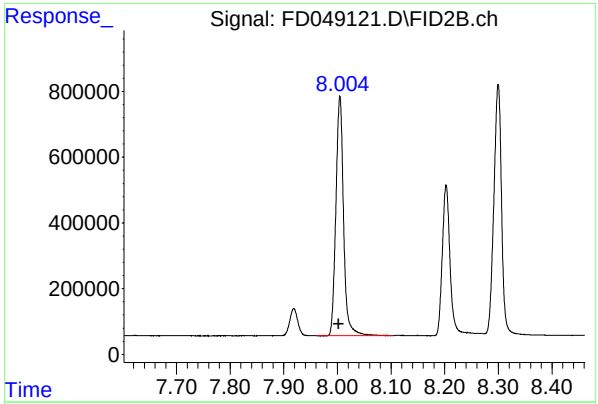

#3 2-Methylnaphthalene (C12.89)

R.T.: 6.739 min
Delta R.T.: 0.000 min
Response: 6668008
Conc: 42.83 ug/ml




#4 2-Bromonaphthalene (SURR)

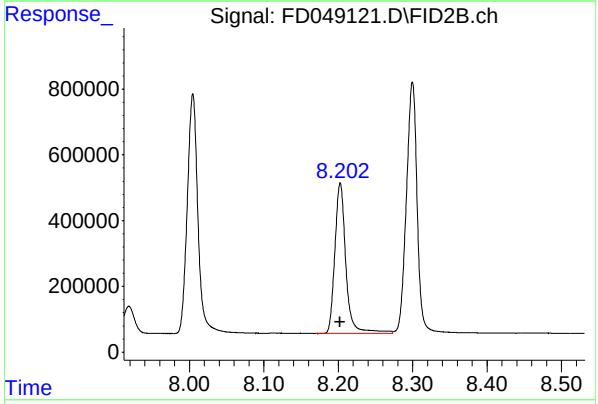
R.T.: 7.352 min
Delta R.T.: 0.000 min
Response: 7562187
Conc: 52.84 ug/ml




#5 Acenaphthylene (C15.06)

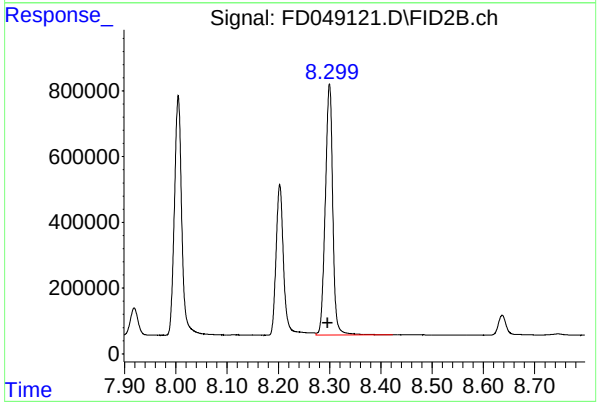
R.T.: 8.005 min
Delta R.T.: 0.002 min
Response: 7237623
Conc: 44.51 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF01-01MS



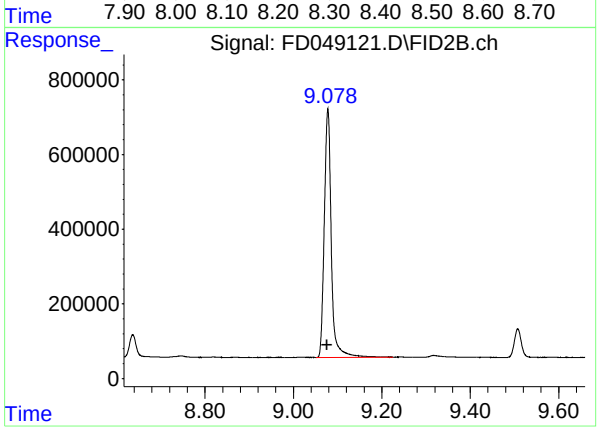

#6 2-Flurobiphenyl (SURR)

R.T.: 8.203 min
Delta R.T.: 0.000 min
Response: 4724292
Conc: 53.74 ug/ml



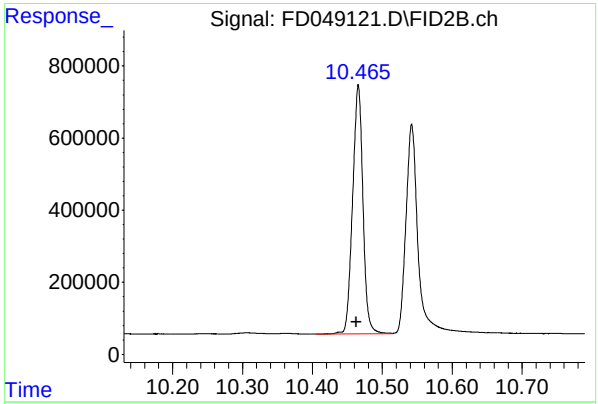

#7 Acenaphthene (C15.5)

R.T.: 8.300 min
Delta R.T.: 0.004 min
Response: 7717519
Conc: 46.91 ug/ml




#8 Flouorene (C16.55)

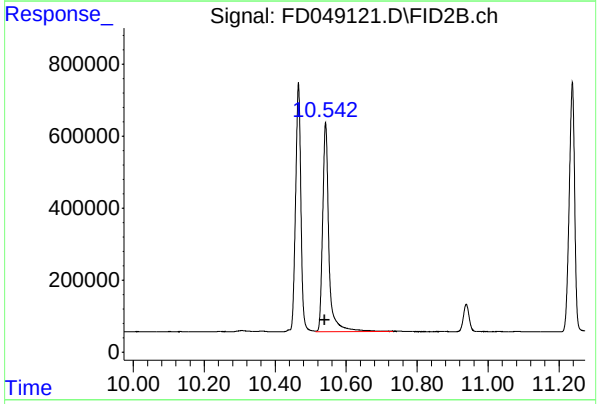
R.T.: 9.078 min
Delta R.T.: 0.002 min
Response: 7323644
Conc: 46.46 ug/ml




#9 Phenanthrene (C19.36)

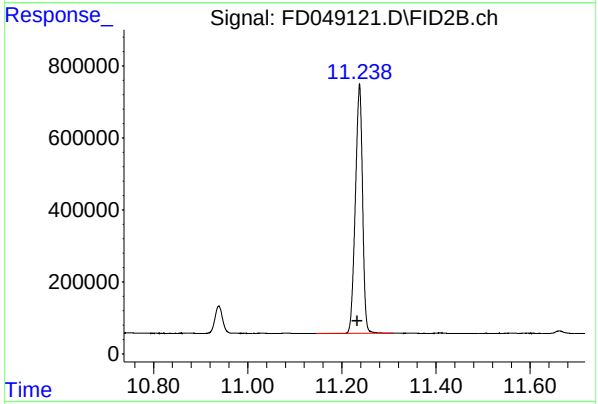
R.T.: 10.466 min
Delta R.T.: 0.003 min
Response: 7113700
Conc: 47.20 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF01-01MS



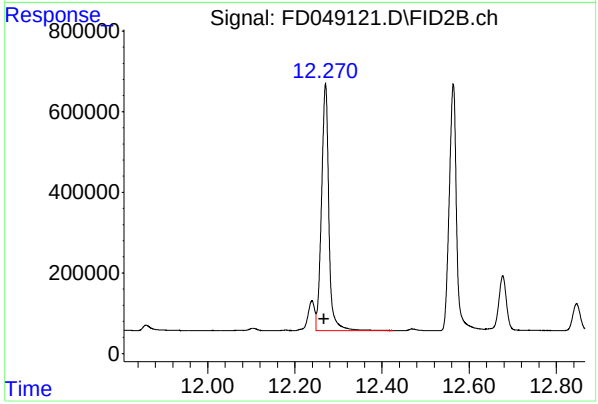

#10 Anthracene (C19.43)

R.T.: 10.542 min
Delta R.T.: 0.003 min
Response: 7082565
Conc: 46.90 ug/ml



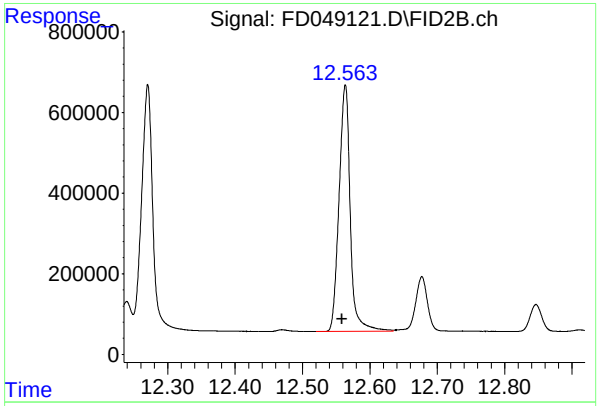

#11 ortho-Terphenyl (SURR)

R.T.: 11.238 min
Delta R.T.: 0.004 min
Response: 7326185
Conc: 45.29 ug/ml




#12 Fluoranthene (C21.85)

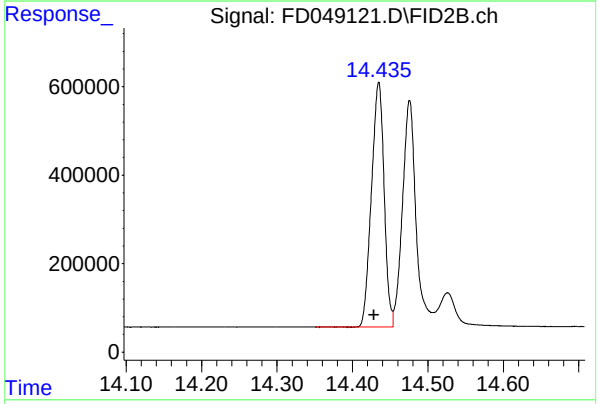
R.T.: 12.270 min
Delta R.T.: 0.003 min
Response: 7159819
Conc: 46.40 ug/ml




#13 Pyrene (C20.8)

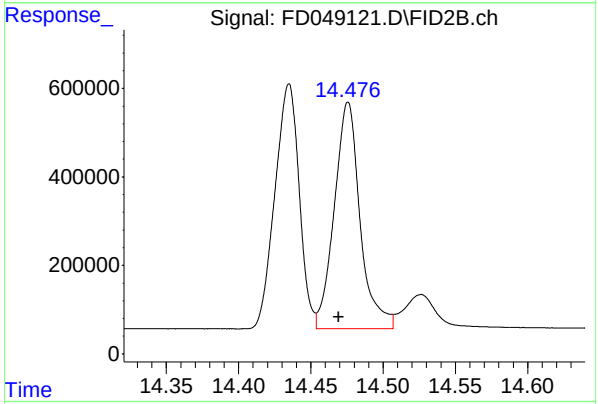
R.T.: 12.564 min
Delta R.T.: 0.005 min
Response: 7060627
Conc: 45.83 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF01-01MS



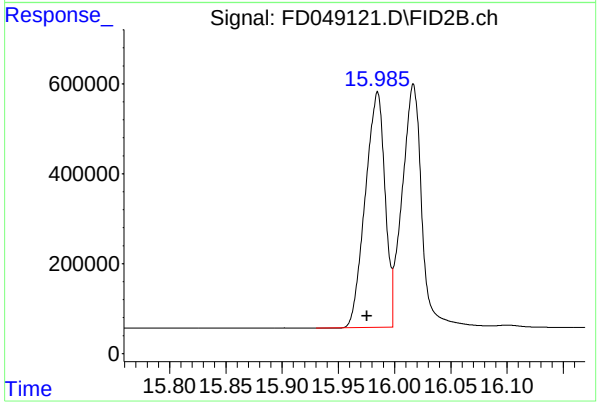

#14 Benzo[a]anthracene (C26.37)

R.T.: 14.435 min
Delta R.T.: 0.006 min
Response: 6445076
Conc: 49.05 ug/ml



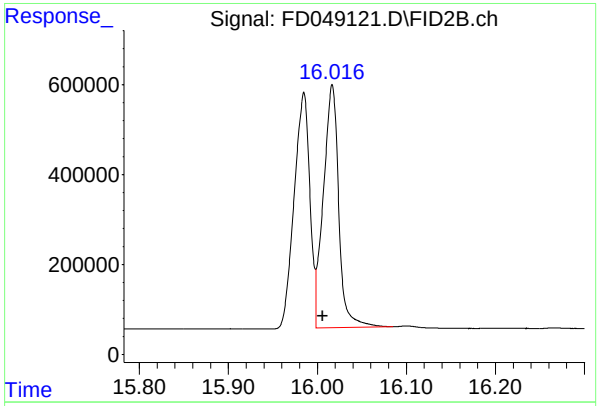

#15 Chrysene (C27.41)

R.T.: 14.476 min
Delta R.T.: 0.006 min
Response: 6362968
Conc: 39.35 ug/ml




#16 benzo[b]fluoranthene (C30.41)

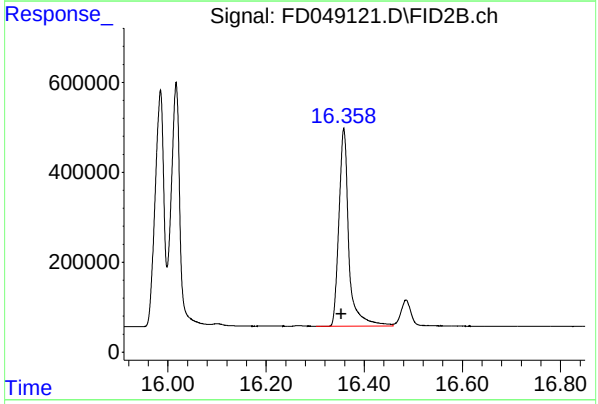
R.T.: 15.985 min
Delta R.T.: 0.009 min
Response: 6392023
Conc: 46.46 ug/ml




#17 Bnezo[k]fluoranthene (C30.14)

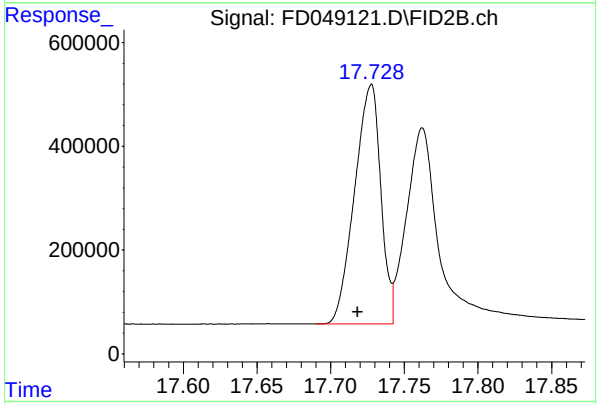
R.T.: 16.017 min
Delta R.T.: 0.011 min
Response: 6501603
Conc: 41.16 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF01-01MS



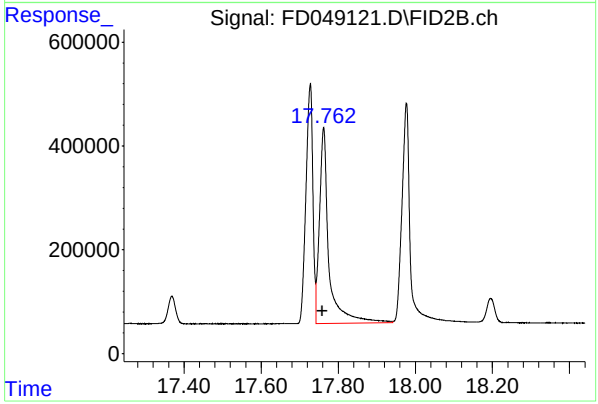

#18 Benzo[a]pyrene (C31.34)

R.T.: 16.359 min
Delta R.T.: 0.005 min
Response: 6186282
Conc: 45.58 ug/ml



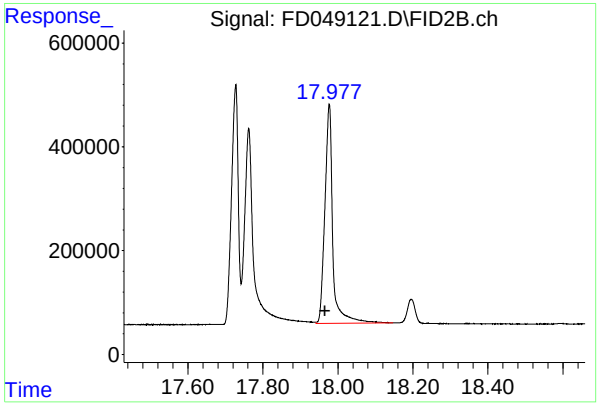

#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.728 min
Delta R.T.: 0.009 min
Response: 5704377
Conc: 52.20 ug/ml




#20 Dibenz[a,h]anthracene (C30.36)

R.T.: 17.762 min
Delta R.T.: 0.003 min
Response: 6408761
Conc: 41.31 ug/ml




#21 Benzo[g,h,i]perylene (C34.01)

R.T.: 17.977 min
Delta R.T.: 0.011 mi
Response: 6190558
Conc: 42.71 ug/m

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF01-01MS

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022725AR\
Data File : FD049121.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2025 14:03
Sample : Q1421-05
Misc :
ALS Vial : 65 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Title : GC Extractables

Signal : FID2B.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 4.078 | 4.070 | 4.127 | PV | 190 | 3932 | 0.05% | 0.002% |
| 2 | 4.149 | 4.127 | 4.162 | VV | 83729 | 759451 | 9.74% | 0.459% |
| 3 | 4.179 | 4.162 | 4.290 | VV | 746622 | 6621417 | 84.91% | 4.001% |
| 4 | 4.296 | 4.290 | 4.302 | VV | 1160 | 7087 | 0.09% | 0.004% |
| 5 | 4.319 | 4.302 | 4.356 | VV | 3191 | 47764 | 0.61% | 0.029% |
| 6 | 4.374 | 4.356 | 4.387 | VV | 2337 | 26185 | 0.34% | 0.016% |
| 7 | 4.404 | 4.387 | 4.454 | VV | 3984 | 54897 | 0.70% | 0.033% |
| 8 | 4.460 | 4.454 | 4.475 | VV | 264 | 2377 | 0.03% | 0.001% |
| 9 | 4.490 | 4.475 | 4.502 | VV | 817 | 7875 | 0.10% | 0.005% |
| 10 | 4.511 | 4.502 | 4.540 | VV | 688 | 9292 | 0.12% | 0.006% |
| 11 | 4.548 | 4.540 | 4.561 | VV | 330 | 1885 | 0.02% | 0.001% |
| 12 | 4.585 | 4.561 | 4.612 | VV | 483 | 8362 | 0.11% | 0.005% |
| 13 | 4.614 | 4.612 | 4.636 | VV | 235 | 1639 | 0.02% | 0.001% |
| 14 | 4.644 | 4.636 | 4.663 | VV | 265 | 1821 | 0.02% | 0.001% |
| 15 | 4.669 | 4.663 | 4.683 | PV | 245 | 1285 | 0.02% | 0.001% |
| 16 | 4.694 | 4.683 | 4.710 | VV | 466 | 4197 | 0.05% | 0.003% |
| 17 | 4.716 | 4.710 | 4.723 | VV | 318 | 1296 | 0.02% | 0.001% |
| 18 | 4.731 | 4.723 | 4.742 | VV | 230 | 1964 | 0.03% | 0.001% |
| 19 | 4.771 | 4.742 | 4.813 | VV | 7891 | 111877 | 1.43% | 0.068% |
| 20 | 4.829 | 4.813 | 4.887 | VV | 1784 | 25973 | 0.33% | 0.016% |
| 21 | 4.889 | 4.887 | 4.905 | VV | 233 | 1096 | 0.01% | 0.001% |
| 22 | 4.911 | 4.905 | 4.948 | VV | 264 | 3755 | 0.05% | 0.002% |
| 23 | 4.964 | 4.948 | 4.993 | VV | 370 | 7103 | 0.09% | 0.004% |
| 24 | 4.999 | 4.993 | 5.005 | VV | 297 | 1799 | 0.02% | 0.001% |
| 25 | 5.010 | 5.005 | 5.036 | VV | 389 | 2729 | 0.03% | 0.002% |
| 26 | 5.060 | 5.036 | 5.117 | PV | 1390 | 34750 | 0.45% | 0.021% |
| 27 | 5.118 | 5.117 | 5.124 | VV | 495 | 1935 | 0.02% | 0.001% |
| 28 | 5.133 | 5.124 | 5.161 | VV | 529 | 9469 | 0.12% | 0.006% |
| 29 | 5.179 | 5.161 | 5.196 | VV | 1433 | 18876 | 0.24% | 0.011% |
| 30 | 5.213 | 5.196 | 5.237 | VV | 2639 | 32279 | 0.41% | 0.020% |
| 31 | 5.249 | 5.237 | 5.255 | VV | 551 | 4939 | 0.06% | 0.003% |
| 32 | 5.269 | 5.255 | 5.295 | VV | 785 | 12482 | 0.16% | 0.008% |
| 33 | 5.300 | 5.295 | 5.308 | VV | 417 | 2329 | 0.03% | 0.001% |
| 34 | 5.316 | 5.308 | 5.328 | VV | 429 | 4047 | 0.05% | 0.002% |
| 35 | 5.332 | 5.328 | 5.345 | VV | 484 | 3825 | 0.05% | 0.002% |
| 36 | 5.353 | 5.345 | 5.359 | VV | 527 | 3362 | 0.04% | 0.002% |

rteres

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 37 | 5.362 | 5.359 | 5.397 | VV | 430 | 5193 | 0.07% | 0.003% |
| 38 | 5.417 | 5.397 | 5.445 | VV | 301 | 4841 | 0.06% | 0.003% |
| 39 | 5.461 | 5.445 | 5.496 | VV | 549 | 9975 | 0.13% | 0.006% |
| 40 | 5.514 | 5.496 | 5.563 | VV | 411 | 10550 | 0.14% | 0.006% |
| 41 | 5.568 | 5.563 | 5.604 | VV | 276 | 4141 | 0.05% | 0.003% |
| 42 | 5.627 | 5.615 | 5.647 | VV | 379 | 3827 | 0.05% | 0.002% |
| 43 | 5.656 | 5.647 | 5.669 | VV | 229 | 1260 | 0.02% | 0.001% |
| 44 | 5.694 | 5.669 | 5.800 | PV | 717979 | 7098427 | 91.03% | 4.290% |
| 45 | 5.813 | 5.800 | 5.860 | VV | 3733 | 92495 | 1.19% | 0.056% |
| 46 | 5.868 | 5.860 | 5.906 | VV | 1770 | 37900 | 0.49% | 0.023% |
| 47 | 5.934 | 5.906 | 5.980 | VV | 1373 | 40363 | 0.52% | 0.024% |
| 48 | 5.986 | 5.980 | 5.997 | VV | 712 | 4612 | 0.06% | 0.003% |
| 49 | 6.004 | 5.997 | 6.015 | VV | 553 | 4575 | 0.06% | 0.003% |
| 50 | 6.020 | 6.015 | 6.053 | VV | 480 | 8561 | 0.11% | 0.005% |
| 51 | 6.072 | 6.053 | 6.099 | VV | 535 | 12047 | 0.15% | 0.007% |
| 52 | 6.109 | 6.099 | 6.113 | VV | 428 | 3145 | 0.04% | 0.002% |
| 53 | 6.140 | 6.113 | 6.202 | VV | 83861 | 872717 | 11.19% | 0.527% |
| 54 | 6.223 | 6.202 | 6.245 | VV | 1433 | 22047 | 0.28% | 0.013% |
| 55 | 6.262 | 6.245 | 6.276 | VV | 972 | 12488 | 0.16% | 0.008% |
| 56 | 6.293 | 6.276 | 6.311 | VV | 2287 | 28768 | 0.37% | 0.017% |
| 57 | 6.325 | 6.311 | 6.345 | VV | 924 | 12783 | 0.16% | 0.008% |
| 58 | 6.363 | 6.345 | 6.432 | VV | 1355 | 25399 | 0.33% | 0.015% |
| 59 | 6.442 | 6.432 | 6.462 | PV | 274 | 3981 | 0.05% | 0.002% |
| 60 | 6.476 | 6.462 | 6.480 | VV | 385 | 3305 | 0.04% | 0.002% |
| 61 | 6.484 | 6.480 | 6.488 | VV | 383 | 1243 | 0.02% | 0.001% |
| 62 | 6.494 | 6.488 | 6.533 | VV | 294 | 6207 | 0.08% | 0.004% |
| 63 | 6.537 | 6.533 | 6.546 | VV | 203 | 1331 | 0.02% | 0.001% |
| 64 | 6.551 | 6.546 | 6.558 | VV | 311 | 1291 | 0.02% | 0.001% |
| 65 | 6.578 | 6.558 | 6.608 | VV | 1332 | 15368 | 0.20% | 0.009% |
| 66 | 6.635 | 6.608 | 6.643 | VV | 1272 | 14820 | 0.19% | 0.009% |
| 67 | 6.659 | 6.643 | 6.695 | VV | 12677 | 156794 | 2.01% | 0.095% |
| 68 | 6.707 | 6.695 | 6.711 | VV | 1406 | 12583 | 0.16% | 0.008% |
| 69 | 6.739 | 6.711 | 6.885 | VV | 615266 | 6713022 | 86.08% | 4.057% |
| 70 | 6.914 | 6.885 | 6.949 | VV | 6192 | 99575 | 1.28% | 0.060% |
| 71 | 6.992 | 6.949 | 7.015 | VV | 2573 | 67569 | 0.87% | 0.041% |
| 72 | 7.024 | 7.015 | 7.037 | VV | 1508 | 19268 | 0.25% | 0.012% |
| 73 | 7.058 | 7.037 | 7.088 | VV | 1926 | 40884 | 0.52% | 0.025% |
| 74 | 7.091 | 7.088 | 7.098 | VV | 731 | 3851 | 0.05% | 0.002% |
| 75 | 7.115 | 7.098 | 7.131 | VV | 1202 | 16624 | 0.21% | 0.010% |
| 76 | 7.146 | 7.131 | 7.194 | VV | 1276 | 22037 | 0.28% | 0.013% |
| 77 | 7.201 | 7.194 | 7.205 | VV | 341 | 1812 | 0.02% | 0.001% |
| 78 | 7.210 | 7.205 | 7.218 | VV | 241 | 2143 | 0.03% | 0.001% |
| 79 | 7.232 | 7.218 | 7.247 | VV | 709 | 7816 | 0.10% | 0.005% |
| 80 | 7.261 | 7.247 | 7.267 | VV | 461 | 4308 | 0.06% | 0.003% |
| 81 | 7.281 | 7.267 | 7.298 | VV | 441 | 6679 | 0.09% | 0.004% |
| 82 | 7.315 | 7.298 | 7.328 | VV | 1876 | 19374 | 0.25% | 0.012% |
| 83 | 7.352 | 7.328 | 7.520 | VV | 744620 | 7635238 | 97.91% | 4.614% |
| 84 | 7.521 | 7.520 | 7.537 | VV | 846 | 6982 | 0.09% | 0.004% |
| 85 | 7.545 | 7.537 | 7.568 | VV | 791 | 11545 | 0.15% | 0.007% |
| 86 | 7.577 | 7.568 | 7.598 | VV | 729 | 9313 | 0.12% | 0.006% |
| 87 | 7.602 | 7.598 | 7.608 | VV | 354 | 2064 | 0.03% | 0.001% |
| 88 | 7.622 | 7.608 | 7.667 | VV | 1171 | 15686 | 0.20% | 0.009% |
| 89 | 7.675 | 7.667 | 7.690 | VV | 317 | 3535 | 0.05% | 0.002% |

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|---|---|---|---|---|---|---|---|---|
| 90 | 7.710 | 7.690 | 7.727 | VV | 449 | 7191 | 0.09% | 0.004% |
| 91 | 7.800 | 7.774 | 7.817 | PV | 350 | 3838 | 0.05% | 0.002% |
| 92 | 7.835 | 7.817 | 7.848 | VV | 395 | 3623 | 0.05% | 0.002% |
| 93 | 7.865 | 7.848 | 7.880 | PV | 640 | 7914 | 0.10% | 0.005% |
| 94 | 7.919 | 7.880 | 7.978 | VV | 83119 | 867363 | 11.12% | 0.524% |
| 95 | 8.005 | 7.978 | 8.103 | VV | 730274 | 7282460 | 93.38% | 4.401% |
| 96 | 8.115 | 8.103 | 8.137 | VV | 1351 | 20843 | 0.27% | 0.013% |
| 97 | 8.149 | 8.137 | 8.174 | VV | 1095 | 14250 | 0.18% | 0.009% |
| 98 | 8.203 | 8.174 | 8.273 | VV | 458324 | 4753194 | 60.95% | 2.872% |
| 99 | 8.300 | 8.273 | 8.405 | VV | 765533 | 7798326 | 100.00% | 4.713% |
| 100 | 8.410 | 8.405 | 8.423 | VV | 1718 | 18022 | 0.23% | 0.011% |
| 101 | 8.428 | 8.423 | 8.439 | VV | 1620 | 13364 | 0.17% | 0.008% |
| 102 | 8.461 | 8.439 | 8.502 | VV | 2075 | 53331 | 0.68% | 0.032% |
| 103 | 8.516 | 8.502 | 8.531 | VV | 1006 | 13875 | 0.18% | 0.008% |
| 104 | 8.537 | 8.531 | 8.552 | VV | 677 | 6483 | 0.08% | 0.004% |
| 105 | 8.564 | 8.552 | 8.591 | VV | 796 | 14992 | 0.19% | 0.009% |
| 106 | 8.597 | 8.591 | 8.609 | VV | 513 | 4841 | 0.06% | 0.003% |
| 107 | 8.637 | 8.609 | 8.709 | VV | 61243 | 697581 | 8.95% | 0.422% |
| 108 | 8.746 | 8.709 | 8.790 | VV | 4353 | 88343 | 1.13% | 0.053% |
| 109 | 8.819 | 8.790 | 8.854 | VV | 1294 | 26125 | 0.34% | 0.016% |
| 110 | 8.870 | 8.854 | 8.893 | VV | 675 | 8038 | 0.10% | 0.005% |
| 111 | 8.901 | 8.893 | 8.915 | VV | 318 | 2399 | 0.03% | 0.001% |
| 112 | 8.920 | 8.915 | 8.935 | VV | 385 | 3020 | 0.04% | 0.002% |
| 113 | 8.945 | 8.935 | 8.957 | VV | 450 | 4199 | 0.05% | 0.003% |
| 114 | 8.973 | 8.957 | 8.995 | VV | 369 | 6178 | 0.08% | 0.004% |
| 115 | 9.021 | 8.995 | 9.032 | VV | 650 | 9775 | 0.13% | 0.006% |
| 116 | 9.044 | 9.032 | 9.051 | VV | 532 | 5005 | 0.06% | 0.003% |
| 117 | 9.078 | 9.051 | 9.227 | VV | 667164 | 7394897 | 94.83% | 4.469% |
| 118 | 9.241 | 9.227 | 9.270 | VV | 1464 | 30479 | 0.39% | 0.018% |
| 119 | 9.275 | 9.270 | 9.284 | VV | 954 | 6777 | 0.09% | 0.004% |
| 120 | 9.317 | 9.284 | 9.392 | VV | 5623 | 142395 | 1.83% | 0.086% |
| 121 | 9.394 | 9.392 | 9.423 | VV | 820 | 12458 | 0.16% | 0.008% |
| 122 | 9.434 | 9.423 | 9.462 | VV | 762 | 12577 | 0.16% | 0.008% |
| 123 | 9.468 | 9.462 | 9.475 | VV | 324 | 1973 | 0.03% | 0.001% |
| 124 | 9.508 | 9.475 | 9.562 | VV | 77174 | 852302 | 10.93% | 0.515% |
| 125 | 9.588 | 9.562 | 9.613 | VV | 797 | 15565 | 0.20% | 0.009% |
| 126 | 9.619 | 9.613 | 9.628 | VV | 484 | 3588 | 0.05% | 0.002% |
| 127 | 9.651 | 9.628 | 9.676 | VV | 523 | 10417 | 0.13% | 0.006% |
| 128 | 9.684 | 9.676 | 9.707 | VV | 361 | 3495 | 0.04% | 0.002% |
| 129 | 9.712 | 9.707 | 9.735 | VV | 185 | 1429 | 0.02% | 0.001% |
| 130 | 9.752 | 9.735 | 9.771 | PV | 451 | 4227 | 0.05% | 0.003% |
| 131 | 9.783 | 9.771 | 9.798 | VV | 363 | 4402 | 0.06% | 0.003% |
| 132 | 9.822 | 9.798 | 9.849 | VV | 1241 | 20493 | 0.26% | 0.012% |
| 133 | 9.881 | 9.849 | 9.887 | VV | 641 | 10340 | 0.13% | 0.006% |
| 134 | 9.903 | 9.887 | 9.917 | VV | 641 | 8274 | 0.11% | 0.005% |
| 135 | 9.930 | 9.917 | 9.953 | VV | 654 | 9097 | 0.12% | 0.005% |
| 136 | 9.962 | 9.953 | 9.983 | VV | 472 | 7390 | 0.09% | 0.004% |
| 137 | 9.987 | 9.983 | 9.996 | VV | 490 | 3274 | 0.04% | 0.002% |
| 138 | 10.011 | 9.996 | 10.027 | VV | 1007 | 11312 | 0.15% | 0.007% |
| 139 | 10.046 | 10.027 | 10.058 | VV | 474 | 6574 | 0.08% | 0.004% |
| 140 | 10.072 | 10.058 | 10.078 | VV | 439 | 4614 | 0.06% | 0.003% |
| 141 | 10.104 | 10.078 | 10.117 | VV | 1039 | 14925 | 0.19% | 0.009% |

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|---|---|---|---|---|---|---|---|---|
| 142 | 10.133 | 10.117 | 10.161 | VV | 1079 | 17149 | 0.22% | 0.010% |
| 143 | 10.180 | 10.161 | 10.206 | VV | 888 | 15882 | 0.20% | 0.010% |
| 144 | 10.247 | 10.206 | 10.279 | VV | 1214 | 31829 | 0.41% | 0.019% |
| 145 | 10.306 | 10.279 | 10.341 | VV | 3723 | 83164 | 1.07% | 0.050% |
| 146 | 10.365 | 10.341 | 10.385 | VV | 2251 | 39640 | 0.51% | 0.024% |
| 147 | 10.391 | 10.385 | 10.394 | VV | 668 | 3026 | 0.04% | 0.002% |
| 148 | 10.466 | 10.394 | 10.515 | VV | 691922 | 7166205 | 91.89% | 4.331% |
| 149 | 10.542 | 10.515 | 10.732 | VV | 582163 | 7259492 | 93.09% | 4.387% |
| 150 | 10.736 | 10.732 | 10.739 | VV | 1956 | 7904 | 0.10% | 0.005% |
| 151 | 10.746 | 10.739 | 10.798 | VV | 2141 | 54593 | 0.70% | 0.033% |
| 152 | 10.803 | 10.798 | 10.818 | VV | 1121 | 11958 | 0.15% | 0.007% |
| 153 | 10.823 | 10.818 | 10.852 | VV | 1082 | 19459 | 0.25% | 0.012% |
| 154 | 10.873 | 10.852 | 10.903 | VV | 1631 | 33867 | 0.43% | 0.020% |
| 155 | 10.939 | 10.903 | 11.008 | VV | 77278 | 909338 | 11.66% | 0.550% |
| 156 | 11.013 | 11.008 | 11.020 | VV | 1118 | 6812 | 0.09% | 0.004% |
| 157 | 11.029 | 11.020 | 11.048 | VV | 1266 | 17322 | 0.22% | 0.010% |
| 158 | 11.053 | 11.048 | 11.066 | VV | 838 | 8176 | 0.10% | 0.005% |
| 159 | 11.082 | 11.066 | 11.110 | VV | 1662 | 27479 | 0.35% | 0.017% |
| 160 | 11.118 | 11.110 | 11.127 | VV | 706 | 6408 | 0.08% | 0.004% |
| 161 | 11.132 | 11.127 | 11.136 | VV | 692 | 3366 | 0.04% | 0.002% |
| 162 | 11.152 | 11.136 | 11.157 | VV | 687 | 8268 | 0.11% | 0.005% |
| 163 | 11.162 | 11.157 | 11.170 | VV | 748 | 4967 | 0.06% | 0.003% |
| 164 | 11.176 | 11.170 | 11.204 | VV | 846 | 12878 | 0.17% | 0.008% |
| 165 | 11.238 | 11.204 | 11.309 | VV | 696928 | 7397306 | 94.86% | 4.470% |
| 166 | 11.321 | 11.309 | 11.335 | VV | 1527 | 20868 | 0.27% | 0.013% |
| 167 | 11.349 | 11.335 | 11.368 | VV | 1442 | 24410 | 0.31% | 0.015% |
| 168 | 11.375 | 11.368 | 11.386 | VV | 1017 | 10032 | 0.13% | 0.006% |
| 169 | 11.409 | 11.386 | 11.441 | VV | 2161 | 41437 | 0.53% | 0.025% |
| 170 | 11.450 | 11.441 | 11.458 | VV | 789 | 7166 | 0.09% | 0.004% |
| 171 | 11.465 | 11.458 | 11.476 | VV | 744 | 6387 | 0.08% | 0.004% |
| 172 | 11.506 | 11.476 | 11.523 | VV | 1183 | 24282 | 0.31% | 0.015% |
| 173 | 11.536 | 11.523 | 11.545 | VV | 1110 | 13757 | 0.18% | 0.008% |
| 174 | 11.560 | 11.545 | 11.580 | VV | 1501 | 24915 | 0.32% | 0.015% |
| 175 | 11.595 | 11.580 | 11.615 | VV | 1271 | 24516 | 0.31% | 0.015% |
| 176 | 11.619 | 11.615 | 11.638 | VV | 1171 | 12558 | 0.16% | 0.008% |
| 177 | 11.662 | 11.638 | 11.695 | VV | 7751 | 108531 | 1.39% | 0.066% |
| 178 | 11.708 | 11.695 | 11.723 | VV | 981 | 14455 | 0.19% | 0.009% |
| 179 | 11.733 | 11.723 | 11.743 | VV | 976 | 10688 | 0.14% | 0.006% |
| 180 | 11.760 | 11.743 | 11.786 | VV | 1009 | 21138 | 0.27% | 0.013% |
| 181 | 11.817 | 11.786 | 11.838 | VV | 1877 | 41372 | 0.53% | 0.025% |
| 182 | 11.859 | 11.838 | 11.973 | VV | 14504 | 284342 | 3.65% | 0.172% |
| 183 | 11.978 | 11.973 | 11.988 | VV | 1291 | 11341 | 0.15% | 0.007% |
| 184 | 11.994 | 11.988 | 12.003 | VV | 1299 | 10349 | 0.13% | 0.006% |
| 185 | 12.012 | 12.003 | 12.040 | VV | 1404 | 25691 | 0.33% | 0.016% |
| 186 | 12.046 | 12.040 | 12.049 | VV | 1122 | 6294 | 0.08% | 0.004% |
| 187 | 12.075 | 12.049 | 12.081 | VV | 1679 | 26742 | 0.34% | 0.016% |
| 188 | 12.105 | 12.081 | 12.143 | VV | 6631 | 105159 | 1.35% | 0.064% |
| 189 | 12.146 | 12.143 | 12.151 | VV | 830 | 3577 | 0.05% | 0.002% |
| 190 | 12.179 | 12.151 | 12.198 | VV | 2266 | 39331 | 0.50% | 0.024% |
| 191 | 12.239 | 12.198 | 12.249 | VV | 75379 | 828232 | 10.62% | 0.501% |
| 192 | 12.270 | 12.249 | 12.412 | VV | 614354 | 7256968 | 93.06% | 4.385% |
| 193 | 12.416 | 12.412 | 12.430 | VV | 1649 | 14657 | 0.19% | 0.009% |
| 194 | 12.435 | 12.430 | 12.453 | VV | 1280 | 17234 | 0.22% | 0.010% |

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|---|---|---|---|---|---|---|---|---|
| 195 | 12.470 | 12.453 | 12.528 | VV | 5339 | 98609 | 1.26% | 0.060% |
| 196 | 12.564 | 12.528 | 12.634 | VV | 613433 | 7143107 | 91.60% | 4.317% |
| 197 | 12.677 | 12.634 | 12.723 | VV | 137352 | 1752815 | 22.48% | 1.059% |
| 198 | 12.728 | 12.723 | 12.779 | VV | 2206 | 60254 | 0.77% | 0.036% |
| 199 | 12.785 | 12.779 | 12.804 | VV | 1406 | 20438 | 0.26% | 0.012% |
| 200 | 12.808 | 12.804 | 12.820 | VV | 1395 | 12447 | 0.16% | 0.008% |
| 201 | 12.847 | 12.820 | 12.888 | VV | 68262 | 848588 | 10.88% | 0.513% |
| 202 | 12.911 | 12.888 | 12.955 | VV | 5006 | 93933 | 1.20% | 0.057% |
| 203 | 12.961 | 12.955 | 12.967 | VV | 1169 | 7683 | 0.10% | 0.005% |
| 204 | 12.975 | 12.967 | 12.983 | VV | 1228 | 11116 | 0.14% | 0.007% |
| 205 | 12.988 | 12.983 | 12.996 | VV | 1224 | 8325 | 0.11% | 0.005% |
| 206 | 13.001 | 12.996 | 13.011 | VV | 1215 | 9690 | 0.12% | 0.006% |
| 207 | 13.019 | 13.011 | 13.025 | VV | 1134 | 8611 | 0.11% | 0.005% |
| 208 | 13.059 | 13.025 | 13.070 | VV | 1440 | 35202 | 0.45% | 0.021% |
| 209 | 13.090 | 13.070 | 13.170 | VV | 4551 | 136414 | 1.75% | 0.082% |
| 210 | 13.175 | 13.170 | 13.188 | VV | 1332 | 13852 | 0.18% | 0.008% |
| 211 | 13.192 | 13.188 | 13.212 | VV | 1305 | 16269 | 0.21% | 0.010% |
| 212 | 13.225 | 13.212 | 13.242 | VV | 1258 | 20553 | 0.26% | 0.012% |
| 213 | 13.246 | 13.242 | 13.249 | VV | 1111 | 4176 | 0.05% | 0.003% |
| 214 | 13.255 | 13.249 | 13.280 | VV | 1118 | 20821 | 0.27% | 0.013% |
| 215 | 13.290 | 13.280 | 13.297 | VV | 1088 | 10307 | 0.13% | 0.006% |
| 216 | 13.310 | 13.297 | 13.319 | VV | 1173 | 13868 | 0.18% | 0.008% |
| 217 | 13.380 | 13.319 | 13.399 | VV | 1903 | 56922 | 0.73% | 0.034% |
| 218 | 13.430 | 13.399 | 13.474 | VV | 68951 | 845927 | 10.85% | 0.511% |
| 219 | 13.487 | 13.474 | 13.509 | VV | 1110 | 20152 | 0.26% | 0.012% |
| 220 | 13.516 | 13.509 | 13.536 | VV | 835 | 12855 | 0.16% | 0.008% |
| 221 | 13.544 | 13.536 | 13.558 | VV | 825 | 9427 | 0.12% | 0.006% |
| 222 | 13.567 | 13.558 | 13.583 | VV | 808 | 10338 | 0.13% | 0.006% |
| 223 | 13.598 | 13.583 | 13.605 | VV | 898 | 9804 | 0.13% | 0.006% |
| 224 | 13.609 | 13.605 | 13.611 | VV | 746 | 2612 | 0.03% | 0.002% |
| 225 | 13.616 | 13.611 | 13.626 | VV | 983 | 7198 | 0.09% | 0.004% |
| 226 | 13.673 | 13.626 | 13.707 | VV | 1013 | 40150 | 0.51% | 0.024% |
| 227 | 13.717 | 13.707 | 13.733 | VV | 856 | 12147 | 0.16% | 0.007% |
| 228 | 13.765 | 13.733 | 13.818 | VV | 1024 | 44462 | 0.57% | 0.027% |
| 229 | 13.868 | 13.818 | 13.917 | VV | 2346 | 76335 | 0.98% | 0.046% |
| 230 | 13.925 | 13.917 | 13.935 | VV | 1026 | 10103 | 0.13% | 0.006% |
| 231 | 13.947 | 13.935 | 13.968 | VV | 1280 | 21227 | 0.27% | 0.013% |
| 232 | 13.983 | 13.968 | 14.022 | VV | 1318 | 32763 | 0.42% | 0.020% |
| 233 | 14.057 | 14.022 | 14.090 | VV | 1088 | 40406 | 0.52% | 0.024% |
| 234 | 14.094 | 14.090 | 14.120 | VV | 1073 | 18046 | 0.23% | 0.011% |
| 235 | 14.128 | 14.120 | 14.140 | VV | 1053 | 12043 | 0.15% | 0.007% |
| 236 | 14.161 | 14.140 | 14.173 | VV | 1176 | 22532 | 0.29% | 0.014% |
| 237 | 14.198 | 14.173 | 14.217 | VV | 1361 | 30944 | 0.40% | 0.019% |
| 238 | 14.237 | 14.217 | 14.247 | VV | 1189 | 19824 | 0.25% | 0.012% |
| 239 | 14.298 | 14.247 | 14.321 | VV | 1277 | 51345 | 0.66% | 0.031% |
| 240 | 14.334 | 14.321 | 14.350 | VV | 1471 | 20781 | 0.27% | 0.013% |
| 241 | 14.363 | 14.350 | 14.400 | VV | 1165 | 31211 | 0.40% | 0.019% |
| 242 | 14.435 | 14.400 | 14.454 | VV | 556516 | 6490725 | 83.23% | 3.922% |
| 243 | 14.476 | 14.454 | 14.507 | VV | 514505 | 6406829 | 82.16% | 3.872% |
| 244 | 14.526 | 14.507 | 14.679 | VV | 78849 | 1487801 | 19.08% | 0.899% |
| 245 | 14.696 | 14.679 | 14.775 | VV | 2504 | 110647 | 1.42% | 0.067% |
| 246 | 14.784 | 14.775 | 14.819 | VV | 1735 | 41164 | 0.53% | 0.025% |

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|---|---|---|---|---|---|---|---|---|
| 247 | 14.843 | 14.819 | 14.867 | VV | 1856 | 43625 | 0.56% | 0.026% |
| 248 | 14.893 | 14.867 | 14.937 | VV | 2768 | 80668 | 1.03% | 0.049% |
| 249 | 14.948 | 14.937 | 14.991 | VV | 1609 | 47729 | 0.61% | 0.029% |
| 250 | 15.011 | 14.991 | 15.029 | VV | 1531 | 32155 | 0.41% | 0.019% |
| 251 | 15.062 | 15.029 | 15.117 | VV | 2973 | 92937 | 1.19% | 0.056% |
| 252 | 15.124 | 15.117 | 15.150 | VV | 1331 | 25108 | 0.32% | 0.015% |
| 253 | 15.180 | 15.150 | 15.222 | VV | 1467 | 59654 | 0.76% | 0.036% |
| 254 | 15.242 | 15.222 | 15.262 | VV | 1841 | 38471 | 0.49% | 0.023% |
| 255 | 15.282 | 15.262 | 15.316 | VV | 1471 | 44410 | 0.57% | 0.027% |
| 256 | 15.397 | 15.316 | 15.440 | VV | 1681 | 110524 | 1.42% | 0.067% |
| 257 | 15.464 | 15.440 | 15.476 | VV | 1502 | 31484 | 0.40% | 0.019% |
| 258 | 15.502 | 15.476 | 15.513 | VV | 2371 | 42031 | 0.54% | 0.025% |
| 259 | 15.543 | 15.513 | 15.640 | VV | 60226 | 859980 | 11.03% | 0.520% |
| 260 | 15.651 | 15.640 | 15.687 | VV | 1404 | 38412 | 0.49% | 0.023% |
| 261 | 15.704 | 15.687 | 15.723 | VV | 1535 | 31405 | 0.40% | 0.019% |
| 262 | 15.733 | 15.723 | 15.773 | VV | 1522 | 43503 | 0.56% | 0.026% |
| 263 | 15.798 | 15.773 | 15.820 | VV | 1561 | 39596 | 0.51% | 0.024% |
| 264 | 15.824 | 15.820 | 15.835 | VV | 1417 | 12025 | 0.15% | 0.007% |
| 265 | 15.847 | 15.835 | 15.868 | VV | 1500 | 27776 | 0.36% | 0.017% |
| 266 | 15.878 | 15.868 | 15.893 | VV | 1471 | 20775 | 0.27% | 0.013% |
| 267 | 15.904 | 15.893 | 15.927 | VV | 1606 | 28605 | 0.37% | 0.017% |
| 268 | 15.984 | 15.927 | 15.998 | VV | 530441 | 6490548 | 83.23% | 3.922% |
| 269 | 16.017 | 15.998 | 16.085 | VV | 545926 | 6748971 | 86.54% | 4.078% |
| 270 | 16.100 | 16.085 | 16.180 | VV | 7723 | 240606 | 3.09% | 0.145% |
| 271 | 16.195 | 16.180 | 16.246 | VV | 2698 | 100218 | 1.29% | 0.061% |
| 272 | 16.267 | 16.246 | 16.310 | VV | 3687 | 100112 | 1.28% | 0.060% |
| 273 | 16.358 | 16.310 | 16.458 | VV | 442599 | 6395119 | 82.01% | 3.865% |
| 274 | 16.485 | 16.458 | 16.661 | VV | 60697 | 1147244 | 14.71% | 0.693% |
| 275 | 16.678 | 16.661 | 16.728 | VV | 2223 | 81593 | 1.05% | 0.049% |
| 276 | 16.743 | 16.728 | 16.783 | VV | 2140 | 67223 | 0.86% | 0.041% |
| 277 | 16.791 | 16.783 | 16.825 | VV | 2097 | 50591 | 0.65% | 0.031% |
| 278 | 16.852 | 16.825 | 16.863 | VV | 2014 | 44544 | 0.57% | 0.027% |
| 279 | 16.868 | 16.863 | 16.877 | VV | 2019 | 15322 | 0.20% | 0.009% |
| 280 | 16.889 | 16.877 | 16.903 | VV | 2027 | 30643 | 0.39% | 0.019% |
| 281 | 16.937 | 16.903 | 16.962 | VV | 2800 | 79102 | 1.01% | 0.048% |
| 282 | 16.970 | 16.962 | 16.978 | VV | 2002 | 18983 | 0.24% | 0.011% |
| 283 | 17.003 | 16.978 | 17.028 | VV | 2134 | 61377 | 0.79% | 0.037% |
| 284 | 17.053 | 17.028 | 17.071 | VV | 2250 | 53558 | 0.69% | 0.032% |
| 285 | 17.080 | 17.071 | 17.113 | VV | 2089 | 51618 | 0.66% | 0.031% |
| 286 | 17.161 | 17.113 | 17.173 | VV | 2330 | 77711 | 1.00% | 0.047% |
| 287 | 17.183 | 17.173 | 17.206 | VV | 2323 | 43703 | 0.56% | 0.026% |
| 288 | 17.228 | 17.206 | 17.241 | VV | 2383 | 48611 | 0.62% | 0.029% |
| 289 | 17.259 | 17.241 | 17.295 | VV | 2953 | 78772 | 1.01% | 0.048% |
| 290 | 17.369 | 17.295 | 17.438 | VV | 55399 | 903606 | 11.59% | 0.546% |
| 291 | 17.456 | 17.438 | 17.542 | VV | 2327 | 140227 | 1.80% | 0.085% |
| 292 | 17.555 | 17.542 | 17.603 | VV | 2328 | 82727 | 1.06% | 0.050% |
| 293 | 17.623 | 17.603 | 17.634 | VV | 2309 | 42171 | 0.54% | 0.025% |
| 294 | 17.727 | 17.634 | 17.743 | VV | 461910 | 5887403 | 75.50% | 3.558% |
| 295 | 17.762 | 17.743 | 17.942 | VV | 380519 | 6815280 | 87.39% | 4.119% |
| 296 | 17.977 | 17.942 | 18.160 | VV | 428547 | 6832975 | 87.62% | 4.129% |
| 297 | 18.196 | 18.160 | 18.300 | VBA | 51141 | 1053602 | 13.51% | 0.637% |

Sum of corrected areas: 165477311

Aromatic EPH 021125.M Fri Feb 28 02:08:14 2025

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Weston Solutions, Inc. | Date Collected: | 02/24/25 |
| Project: | RFP 905 | Date Received: | 02/24/25 |
| Client Sample ID: | P001-CLAY-CF01-01MSD | SDG No.: | Q1421 |
| Lab Sample ID: | Q1421-03 | Matrix: | Solid |
| Analytical Method: | NJEPH | % Solid: | 70.3 |
| Sample Wt/Vol: | 30.03 Units: g | Final Vol: | 2000 uL |
| Soil Aliquot Vol: | uL | Test: | EPH |
| Prep Method : | | | |

| File ID : | Dilution: | Prep Date : | Date Analyzed : | Prep Batch ID |
|---|---|---|---|---|
| FC068335.D | 1 | 02/27/25 | 02/28/25 | PB166923 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| Aliphatic C9-C12 | Aliphatic C9-C12 | 9.71 | | 0.54 | 1.42 | mg/kg |
| Aliphatic C12-C16 | Aliphatic C12-C16 | 9.10 | | 0.34 | 0.95 | mg/kg |
| Aliphatic C16-C21 | Aliphatic C16-C21 | 14.7 | | 0.43 | 1.42 | mg/kg |
| Aliphatic C21-C28 | Aliphatic C21-C28 | 19.6 | | 1.14 | 1.89 | mg/kg |
| Aliphatic C28-C40 | Aliphatic C28-C40 | 34.6 | | 2.56 | 2.84 | mg/kg |
| **SURROGATES** | | | | | | |
| 3383-33-2 | 1-chlorooctadecane (SURR) | 32.3 | | 40 - 140 | 65% | SPK: 50 |
| 84-15-1 | ortho-Terphenyl (SURR) | 0.00 | | 40 - 140 | 0% | SPK: 50 |

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

# Quantitation Report For Aliphatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | Q1421-03 | Acq On: | 28 Feb 2025 19:32 |
| Client Sample ID: | P001-CLAY-CF01-01MSD | Operator: | YP/AJ |
| Data file: | FC068335.D | Misc: | |
| Instrument: | FID_C | ALS Vial: | 22 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aliphatic C9-C12 | 3.104 | 6.369 | 14461616 | 102.539 | 300 | ug/ml |
| Aliphatic C12-C16 | 6.370 | 9.754 | 13124094 | 96.038 | 200 | ug/ml |
| Aliphatic C16-C21 | 9.755 | 13.107 | 20440502 | 155.287 | 300 | ug/ml |
| Aliphatic C21-C28 | 13.108 | 16.761 | 25406827 | 207.079 | 400 | ug/ml |
| Aliphatic C28-C40 | 16.762 | 21.565 | 37555991 | 365.166 | 600 | ug/ml |
| Aliphatic EPH | 3.104 | 21.565 | 110989030 | 926.109 | | ug/ml |
| ortho-Terphenyl (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |
| 1-chlorooctadecane (SURR) | 12.838 | 12.838 | 3629508 | 32.27 | | ug/ml |
| Aliphatic C9-C28 | 3.104 | 16.761 | 73433039 | 560.943 | 1200 | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022825AL\
Data File : FC068335.D
Signal(s) : FID1A.ch
Acq On : 28 Feb 2025 19:32
Operator : YP/AJ
Sample : Q1421-03
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
P001-CLAY-CF01-01MSD

Integration File: autoint1.e
Quant Time: Mar 05 05:25:04 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

| | Compound | R.T. | Response | Conc Units |
|---|---|---|---|---|
| | System Monitoring Compounds | | | |
| 12) S | 1-chlorooctadecane (S... | 12.838 | 3629508 | 32.270 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 64.54% |
| | Target Compounds | | | |
| 1) T | n-Nonane (C9) | 3.205 | 3943747 | 28.034 ug/ml |
| 2) T | n-Decane (C10) | 4.261 | 4754624 | 33.561 ug/ml |
| 4) T | n-Dodecane (C12) | 6.270 | 5235120 | 37.192 ug/ml |
| 6) T | n-Tetradecane (C14) | 8.059 | 5850328 | 42.909 ug/ml |
| 7) T | n-Hexadecane (C16) | 9.655 | 6391300 | 46.664 ug/ml |
| 8) T | n-Octadecane (C18) | 11.093 | 6650779 | 48.632 ug/ml |
| 10) T | n-Eicosane (C20) | 12.400 | 6773133 | 51.986 ug/ml |
| 11) T | n-Heneicosane (C21) | 13.010 | 6452700 | 50.472 ug/ml |
| 13) T | n-Docosane (C22) | 13.595 | 6400679 | 50.788 ug/ml |
| 14) T | n-Tetracosane (C24) | 14.696 | 6277459 | 50.471 ug/ml |
| 15) T | n-Hexacosane (C26) | 15.715 | 6147591 | 50.559 ug/ml |
| 16) T | n-Octacosane (C28) | 16.664 | 5996760 | 50.492 ug/ml |
| 17) T | n-Tricontane (C30) | 17.551 | 6013877 | 49.963 ug/ml |
| 18) T | n-Dotriacontane (C32) | 18.382 | 5975842 | 51.486 ug/ml |
| 19) T | n-Tetratriacontane (C34) | 19.164 | 5937717 | 54.949 ug/ml |
| 20) T | n-Hexatriacontane (C36) | 19.904 | 5683975 | 59.104 ug/ml |
| 21) T | n-Octatriacontane (C38) | 20.616 | 5522915 | 61.436 ug/ml |
| 22) T | n-Tetracontane (C40) | 21.469 | 5359281 | 61.942 ug/ml |

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

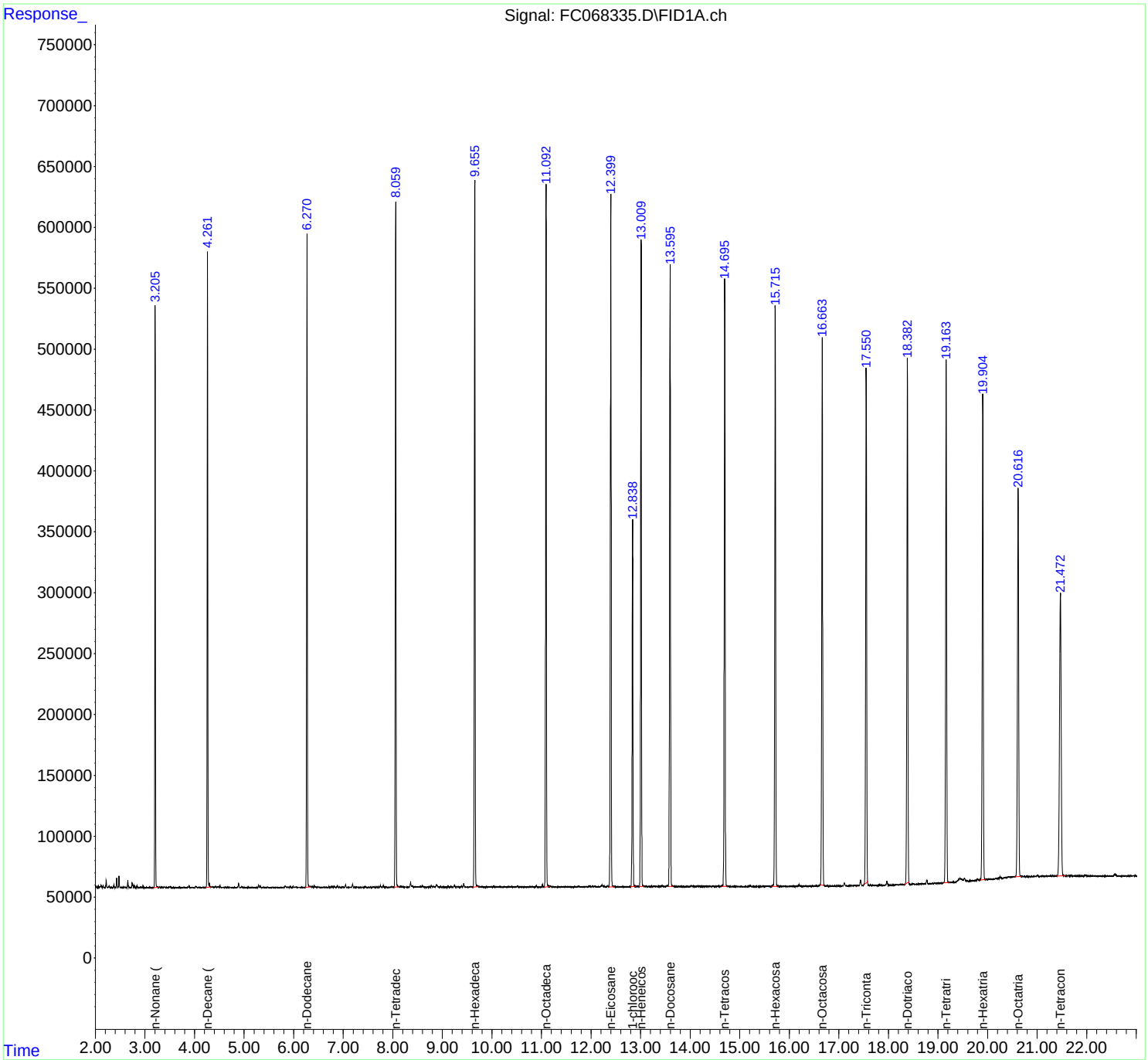
Quantitation Report (QT Reviewed)

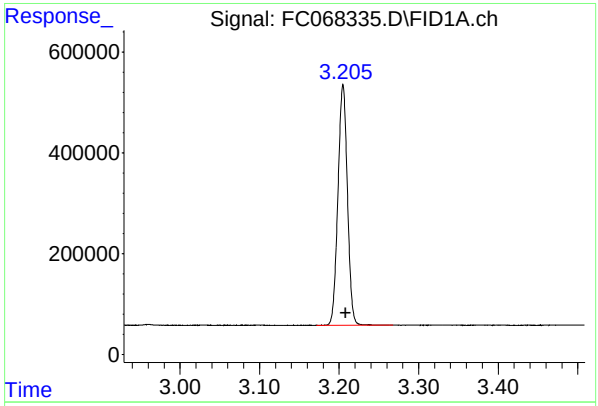
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022825AL\
Data File : FC068335.D
Signal(s) : FID1A.ch
Acq On : 28 Feb 2025 19:32
Operator : YP/AJ
Sample : Q1421-03
Misc :
ALS Vial : 22 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
P001-CLAY-CF01-01MSD

Integration File: autoint1.e
Quant Time: Mar 05 05:25:04 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

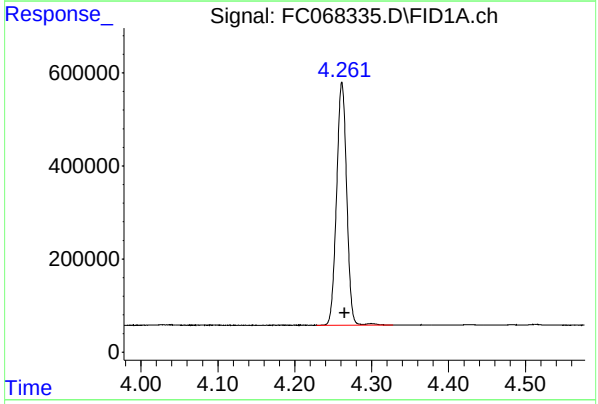





#1 n-Nonane (C9)

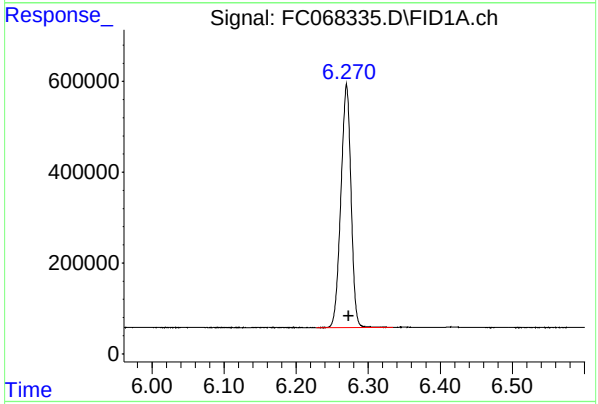
R.T.: 3.205 min
Delta R.T.: -0.003 min
Response: 3943747
Conc: 28.03 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
P001-CLAY-CF01-01MSD



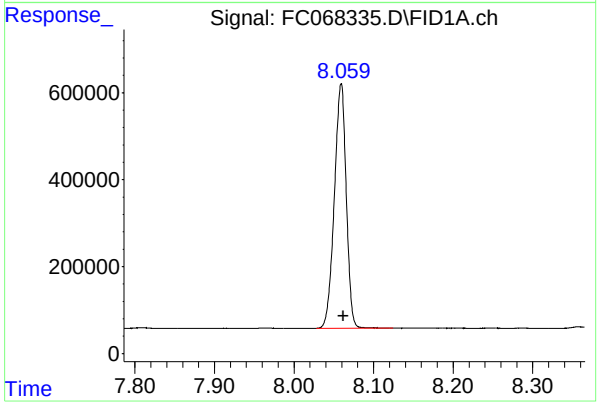

#2 n-Decane (C10)

R.T.: 4.261 min
Delta R.T.: -0.003 min
Response: 4754624
Conc: 33.56 ug/ml



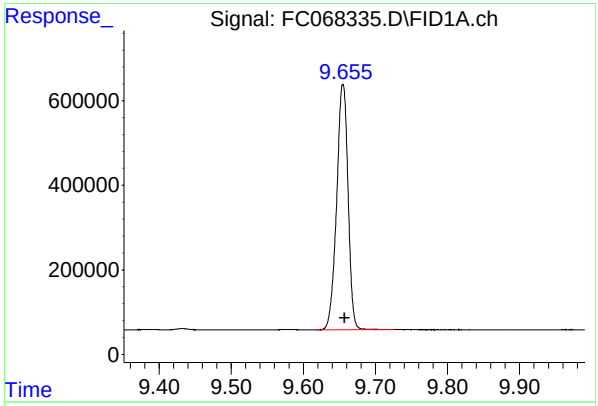

#4 n-Dodecane (C12)

R.T.: 6.270 min
Delta R.T.: -0.003 min
Response: 5235120
Conc: 37.19 ug/ml




#6 n-Tetradecane (C14)

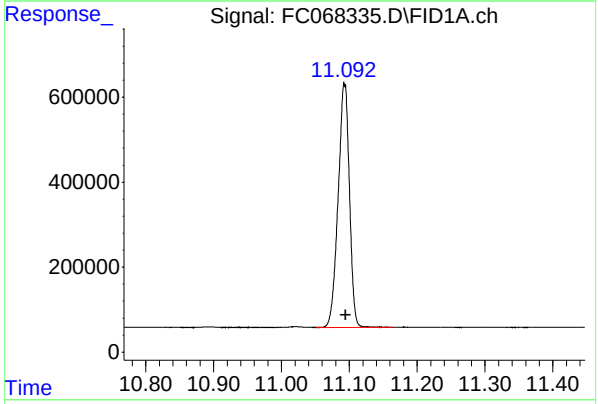
R.T.: 8.059 min
Delta R.T.: -0.003 min
Response: 5850328
Conc: 42.91 ug/ml




#7 n-Hexadecane (C16)

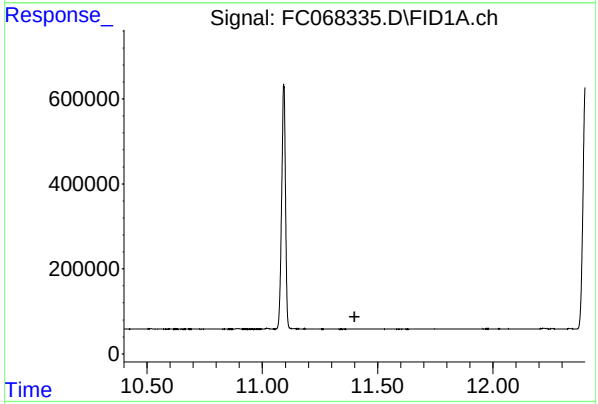
R.T.: 9.655 min
Delta R.T.: -0.002 min
Response: 6391300
Conc: 46.66 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
P001-CLAY-CF01-01MSD



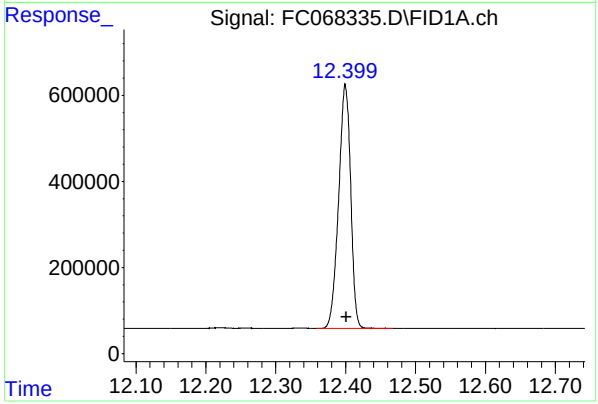

#8 n-Octadecane (C18)

R.T.: 11.093 min
Delta R.T.: -0.002 min
Response: 6650779
Conc: 48.63 ug/ml



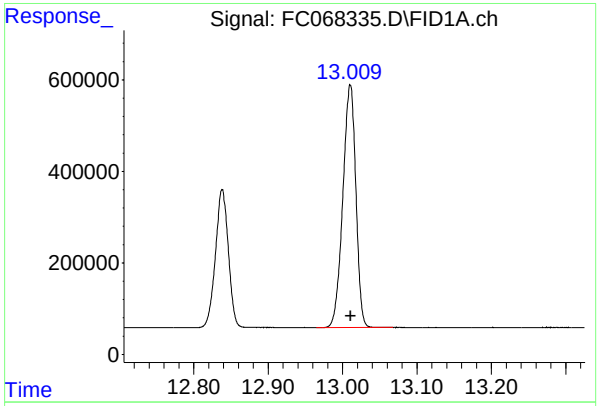

#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.400 min
Response: 0
Conc: N.D.




#10 n-Eicosane (C20)

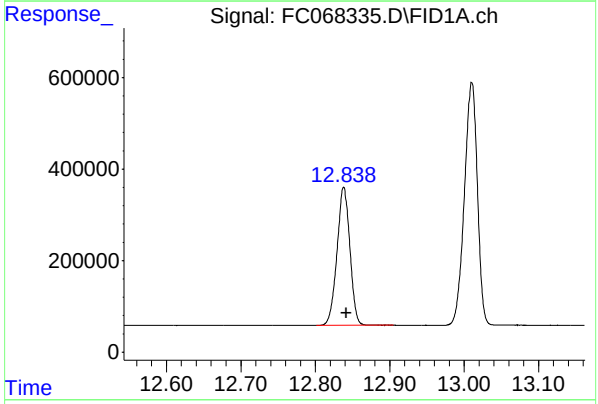
R.T.: 12.400 min
Delta R.T.: -0.001 min
Response: 6773133
Conc: 51.99 ug/ml




#11 n-Heneicosane (C21)

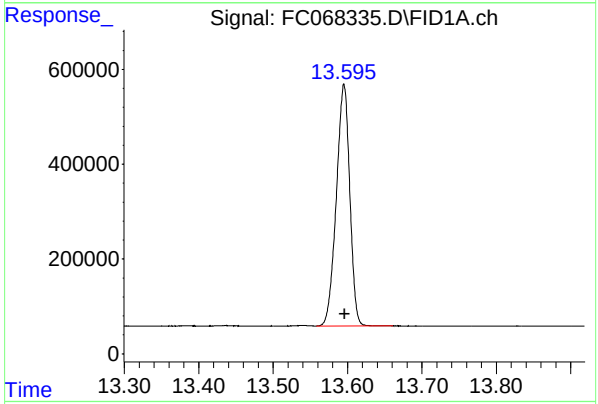
R.T.: 13.010 min
Delta R.T.: 0.000 min
Response: 6452700
Conc: 50.47 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
P001-CLAY-CF01-01MSD



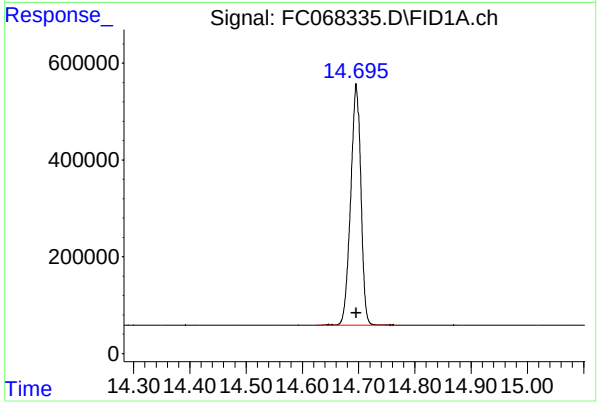

#12 1-chlorooctadecane (SURR)

R.T.: 12.838 min
Delta R.T.: -0.003 min
Response: 3629508
Conc: 32.27 ug/ml



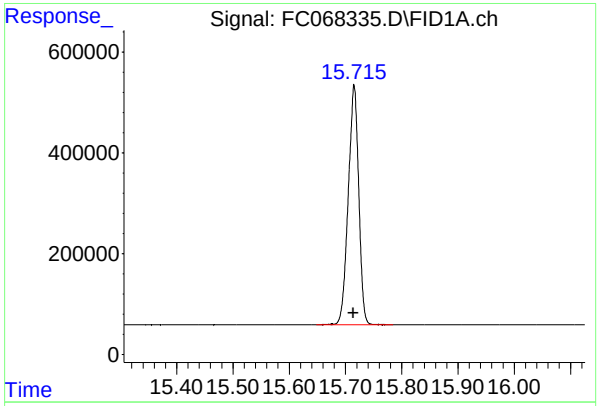

#13 n-Docosane (C22)

R.T.: 13.595 min
Delta R.T.: 0.000 min
Response: 6400679
Conc: 50.79 ug/ml




#14 n-Tetracosane (C24)

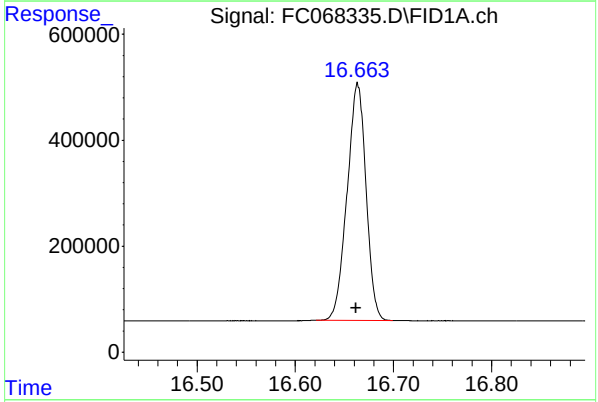
R.T.: 14.696 min
Delta R.T.: 0.000 min
Response: 6277459
Conc: 50.47 ug/ml




#15 n-Hexacosane (C26)

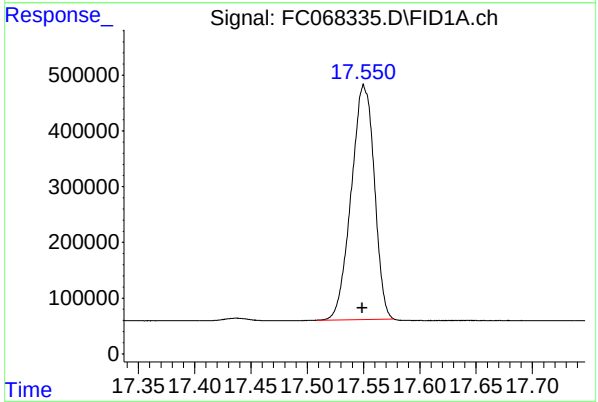
R.T.: 15.715 min
Delta R.T.: 0.001 min
Response: 6147591
Conc: 50.56 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
P001-CLAY-CF01-01MSD



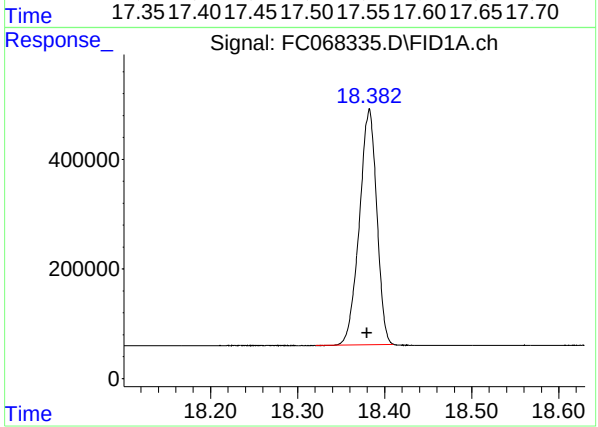

#16 n-Octacosane (C28)

R.T.: 16.664 min
Delta R.T.: 0.001 min
Response: 5996760
Conc: 50.49 ug/ml



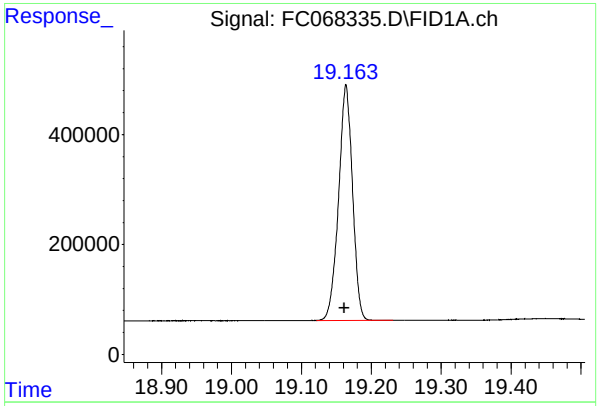

#17 n-Tricontane (C30)

R.T.: 17.551 min
Delta R.T.: 0.002 min
Response: 6013877
Conc: 49.96 ug/ml




#18 n-Dotriacontane (C32)

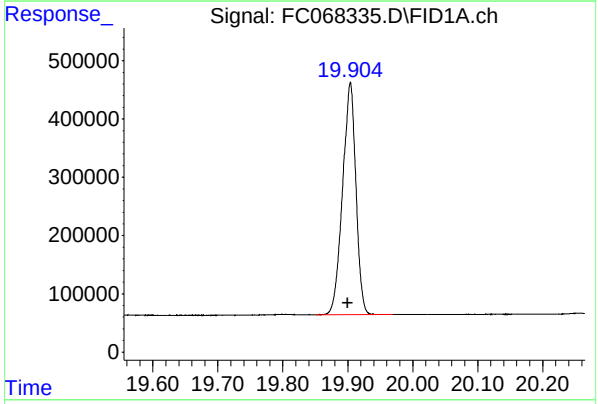
R.T.: 18.382 min
Delta R.T.: 0.002 min
Response: 5975842
Conc: 51.49 ug/ml




#19 n-Tetratriacontane (C34)

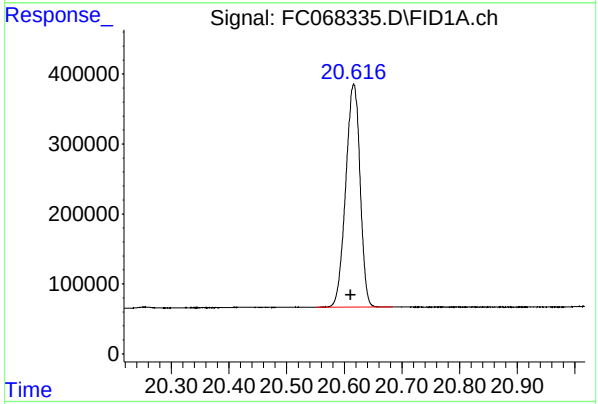
R.T.: 19.164 min
Delta R.T.: 0.003 min
Response: 5937717
Conc: 54.95 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
P001-CLAY-CF01-01MSD



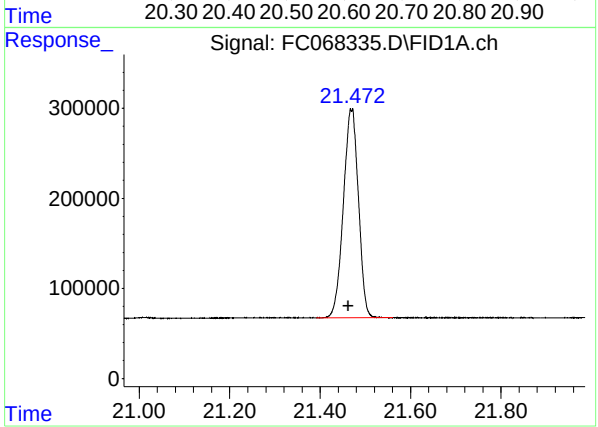

#20 n-Hexatriacontane (C36)

R.T.: 19.904 min
Delta R.T.: 0.004 min
Response: 5683975
Conc: 59.10 ug/ml




#21 n-Octatriacontane (C38)

R.T.: 20.616 min
Delta R.T.: 0.005 min
Response: 5522915
Conc: 61.44 ug/ml




#22 n-Tetracontane (C40)

R.T.: 21.469 min
Delta R.T.: 0.007 min
Response: 5359281
Conc: 61.94 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022825AL\
Data File : FC068335.D
Signal(s) : FID1A.ch
Acq On : 28 Feb 2025 19:32
Sample : Q1421-03
Misc :
ALS Vial : 22 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Title : GC Extractables

Signal : FID1A.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 2.373 | 2.344 | 2.404 | PV | 2502 | 22211 | 0.33% | 0.019% |
| 2 | 2.429 | 2.404 | 2.453 | VV | 7877 | 67361 | 0.99% | 0.058% |
| 3 | 2.475 | 2.453 | 2.515 | VV | 9409 | 77635 | 1.14% | 0.067% |
| 4 | 2.525 | 2.515 | 2.536 | VV | 170 | 1245 | 0.02% | 0.001% |
| 5 | 2.557 | 2.536 | 2.575 | PV | 406 | 4865 | 0.07% | 0.004% |
| 6 | 2.591 | 2.575 | 2.624 | VV | 320 | 4153 | 0.06% | 0.004% |
| 7 | 2.653 | 2.624 | 2.716 | VV | 5738 | 54584 | 0.80% | 0.047% |
| 8 | 2.742 | 2.716 | 2.770 | VV | 3670 | 51262 | 0.75% | 0.044% |
| 9 | 2.786 | 2.770 | 2.819 | VV | 1528 | 16974 | 0.25% | 0.015% |
| 10 | 2.838 | 2.819 | 2.868 | VV | 1723 | 16588 | 0.24% | 0.014% |
| 11 | 2.917 | 2.868 | 2.944 | VV | 307 | 7449 | 0.11% | 0.006% |
| 12 | 2.960 | 2.944 | 3.006 | VV | 1641 | 15916 | 0.23% | 0.014% |
| 13 | 3.030 | 3.006 | 3.080 | VV | 276 | 5287 | 0.08% | 0.005% |
| 14 | 3.100 | 3.080 | 3.144 | VV | 212 | 3993 | 0.06% | 0.003% |
| 15 | 3.205 | 3.144 | 3.278 | VV | 474671 | 3957131 | 58.18% | 3.433% |
| 16 | 3.297 | 3.278 | 3.311 | VV | 378 | 5675 | 0.08% | 0.005% |
| 17 | 3.325 | 3.311 | 3.341 | VV | 402 | 5717 | 0.08% | 0.005% |
| 18 | 3.347 | 3.341 | 3.362 | VV | 269 | 3064 | 0.05% | 0.003% |
| 19 | 3.379 | 3.362 | 3.390 | VV | 341 | 4125 | 0.06% | 0.004% |
| 20 | 3.400 | 3.390 | 3.426 | VV | 265 | 4317 | 0.06% | 0.004% |
| 21 | 3.437 | 3.426 | 3.449 | VV | 243 | 2333 | 0.03% | 0.002% |
| 22 | 3.479 | 3.449 | 3.486 | VV | 429 | 6373 | 0.09% | 0.006% |
| 23 | 3.500 | 3.486 | 3.557 | VV | 642 | 13665 | 0.20% | 0.012% |
| 24 | 3.572 | 3.557 | 3.594 | VV | 260 | 3022 | 0.04% | 0.003% |
| 25 | 3.606 | 3.594 | 3.624 | VV | 188 | 2006 | 0.03% | 0.002% |
| 26 | 3.631 | 3.624 | 3.652 | VV | 188 | 1532 | 0.02% | 0.001% |
| 27 | 3.693 | 3.652 | 3.726 | VV | 330 | 6919 | 0.10% | 0.006% |
| 28 | 3.735 | 3.726 | 3.753 | VV | 129 | 1522 | 0.02% | 0.001% |
| 29 | 3.773 | 3.753 | 3.827 | PV | 316 | 5781 | 0.09% | 0.005% |
| 30 | 3.865 | 3.827 | 3.878 | VV | 528 | 7061 | 0.10% | 0.006% |
| 31 | 3.893 | 3.878 | 3.944 | VV | 949 | 12529 | 0.18% | 0.011% |
| 32 | 3.958 | 3.944 | 3.981 | VV | 257 | 2886 | 0.04% | 0.003% |
| 33 | 4.036 | 3.981 | 4.068 | VV | 924 | 19293 | 0.28% | 0.017% |
| 34 | 4.081 | 4.068 | 4.124 | VV | 267 | 5657 | 0.08% | 0.005% |
| 35 | 4.128 | 4.124 | 4.155 | VV | 116 | 1860 | 0.03% | 0.002% |
| 36 | 4.187 | 4.155 | 4.231 | VV | 184 | 6637 | 0.10% | 0.006% |

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|---|---|---|---|---|---|---|---|---|
| 37 | 4.261 | 4.231 | 4.289 | VV | 520982 | 4732885 | 69.59% | 4.106% |
| 38 | 4.300 | 4.289 | 4.346 | VV | 3590 | 48323 | 0.71% | 0.042% |
| 39 | 4.362 | 4.346 | 4.391 | VV | 749 | 14126 | 0.21% | 0.012% |
| 40 | 4.428 | 4.391 | 4.468 | VV | 1340 | 26822 | 0.39% | 0.023% |
| 41 | 4.483 | 4.468 | 4.497 | VV | 1118 | 12023 | 0.18% | 0.010% |
| 42 | 4.513 | 4.497 | 4.554 | VV | 1695 | 21407 | 0.31% | 0.019% |
| 43 | 4.578 | 4.554 | 4.611 | VV | 238 | 6809 | 0.10% | 0.006% |
| 44 | 4.615 | 4.611 | 4.621 | VV | 255 | 1175 | 0.02% | 0.001% |
| 45 | 4.633 | 4.621 | 4.652 | VV | 221 | 3729 | 0.05% | 0.003% |
| 46 | 4.674 | 4.652 | 4.690 | VV | 235 | 4007 | 0.06% | 0.003% |
| 47 | 4.723 | 4.690 | 4.761 | VV | 284 | 5991 | 0.09% | 0.005% |
| 48 | 4.810 | 4.761 | 4.840 | VV | 356 | 5885 | 0.09% | 0.005% |
| 49 | 4.890 | 4.840 | 4.922 | VV | 3510 | 46198 | 0.68% | 0.040% |
| 50 | 4.945 | 4.922 | 4.962 | VV | 661 | 8349 | 0.12% | 0.007% |
| 51 | 4.972 | 4.962 | 5.054 | VV | 290 | 5251 | 0.08% | 0.005% |
| 52 | 5.078 | 5.054 | 5.103 | VV | 162 | 2912 | 0.04% | 0.003% |
| 53 | 5.165 | 5.103 | 5.231 | VV | 223 | 8730 | 0.13% | 0.008% |
| 54 | 5.242 | 5.231 | 5.249 | VV | 121 | 700 | 0.01% | 0.001% |
| 55 | 5.291 | 5.249 | 5.311 | VV | 1788 | 20915 | 0.31% | 0.018% |
| 56 | 5.331 | 5.311 | 5.371 | VV | 1245 | 16633 | 0.24% | 0.014% |
| 57 | 5.388 | 5.371 | 5.435 | VV | 278 | 5352 | 0.08% | 0.005% |
| 58 | 5.473 | 5.435 | 5.499 | VV | 288 | 6297 | 0.09% | 0.005% |
| 59 | 5.535 | 5.499 | 5.554 | VV | 121 | 2147 | 0.03% | 0.002% |
| 60 | 5.572 | 5.554 | 5.611 | PV | 295 | 6050 | 0.09% | 0.005% |
| 61 | 5.621 | 5.611 | 5.647 | VV | 236 | 3400 | 0.05% | 0.003% |
| 62 | 5.660 | 5.647 | 5.691 | VV | 214 | 3348 | 0.05% | 0.003% |
| 63 | 5.698 | 5.691 | 5.724 | VV | 131 | 1437 | 0.02% | 0.001% |
| 64 | 5.744 | 5.724 | 5.778 | PV | 169 | 3011 | 0.04% | 0.003% |
| 65 | 5.793 | 5.778 | 5.804 | VV | 225 | 2519 | 0.04% | 0.002% |
| 66 | 5.831 | 5.804 | 5.865 | VV | 1155 | 23002 | 0.34% | 0.020% |
| 67 | 5.885 | 5.865 | 5.908 | VV | 585 | 8183 | 0.12% | 0.007% |
| 68 | 5.929 | 5.908 | 5.962 | VV | 1083 | 14937 | 0.22% | 0.013% |
| 69 | 5.990 | 5.962 | 6.033 | VV | 704 | 14474 | 0.21% | 0.013% |
| 70 | 6.060 | 6.033 | 6.098 | VV | 379 | 9625 | 0.14% | 0.008% |
| 71 | 6.107 | 6.098 | 6.134 | VV | 182 | 2833 | 0.04% | 0.002% |
| 72 | 6.155 | 6.134 | 6.172 | VV | 270 | 4197 | 0.06% | 0.004% |
| 73 | 6.190 | 6.172 | 6.211 | VV | 204 | 3469 | 0.05% | 0.003% |
| 74 | 6.270 | 6.211 | 6.334 | VV | 535855 | 5258275 | 77.32% | 4.562% |
| 75 | 6.351 | 6.334 | 6.371 | VV | 1065 | 17085 | 0.25% | 0.015% |
| 76 | 6.386 | 6.371 | 6.399 | VV | 729 | 9657 | 0.14% | 0.008% |
| 77 | 6.416 | 6.399 | 6.438 | VV | 1453 | 18789 | 0.28% | 0.016% |
| 78 | 6.449 | 6.438 | 6.470 | VV | 588 | 7170 | 0.11% | 0.006% |
| 79 | 6.488 | 6.470 | 6.571 | VV | 688 | 16097 | 0.24% | 0.014% |
| 80 | 6.585 | 6.571 | 6.614 | VV | 326 | 5691 | 0.08% | 0.005% |
| 81 | 6.629 | 6.614 | 6.638 | VV | 240 | 3112 | 0.05% | 0.003% |
| 82 | 6.655 | 6.638 | 6.688 | VV | 277 | 5352 | 0.08% | 0.005% |
| 83 | 6.709 | 6.688 | 6.738 | VV | 607 | 8549 | 0.13% | 0.007% |
| 84 | 6.761 | 6.738 | 6.798 | VV | 813 | 16805 | 0.25% | 0.015% |
| 85 | 6.824 | 6.798 | 6.848 | VV | 682 | 14119 | 0.21% | 0.012% |
| 86 | 6.887 | 6.848 | 6.915 | VV | 1123 | 19849 | 0.29% | 0.017% |
| 87 | 6.925 | 6.915 | 6.951 | VV | 352 | 4582 | 0.07% | 0.004% |
| 88 | 6.966 | 6.951 | 6.980 | VV | 305 | 3964 | 0.06% | 0.003% |
| 89 | 6.991 | 6.980 | 7.020 | VV | 276 | 4092 | 0.06% | 0.004% |

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|---|---|---|---|---|---|---|---|---|
| 90 | 7.047 | 7.020 | 7.078 | VV | 2375 | 26454 | 0.39% | 0.023% |
| 91 | 7.115 | 7.078 | 7.141 | VV | 367 | 8903 | 0.13% | 0.008% |
| 92 | 7.154 | 7.141 | 7.166 | VV | 441 | 4874 | 0.07% | 0.004% |
| 93 | 7.189 | 7.166 | 7.216 | VV | 2638 | 31866 | 0.47% | 0.028% |
| 94 | 7.224 | 7.216 | 7.234 | VV | 278 | 2586 | 0.04% | 0.002% |
| 95 | 7.250 | 7.234 | 7.268 | VV | 453 | 6250 | 0.09% | 0.005% |
| 96 | 7.279 | 7.268 | 7.317 | VV | 531 | 7199 | 0.11% | 0.006% |
| 97 | 7.348 | 7.317 | 7.375 | VV | 228 | 4627 | 0.07% | 0.004% |
| 98 | 7.391 | 7.375 | 7.423 | PV | 165 | 2087 | 0.03% | 0.002% |
| 99 | 7.449 | 7.423 | 7.484 | VV | 949 | 12597 | 0.19% | 0.011% |
| 100 | 7.547 | 7.484 | 7.568 | VV | 253 | 7576 | 0.11% | 0.007% |
| 101 | 7.608 | 7.568 | 7.630 | VV | 363 | 7775 | 0.11% | 0.007% |
| 102 | 7.668 | 7.630 | 7.691 | VV | 350 | 8551 | 0.13% | 0.007% |
| 103 | 7.708 | 7.691 | 7.726 | VV | 435 | 5500 | 0.08% | 0.005% |
| 104 | 7.753 | 7.726 | 7.776 | VV | 1610 | 19006 | 0.28% | 0.016% |
| 105 | 7.808 | 7.776 | 7.830 | VV | 1612 | 19530 | 0.29% | 0.017% |
| 106 | 7.848 | 7.830 | 7.863 | VV | 276 | 4150 | 0.06% | 0.004% |
| 107 | 7.878 | 7.863 | 7.897 | VV | 337 | 4135 | 0.06% | 0.004% |
| 108 | 7.911 | 7.897 | 7.938 | VV | 306 | 3742 | 0.06% | 0.003% |
| 109 | 7.963 | 7.938 | 8.024 | VV | 838 | 13975 | 0.21% | 0.012% |
| 110 | 8.059 | 8.024 | 8.133 | VV | 558311 | 5876988 | 86.41% | 5.099% |
| 111 | 8.154 | 8.133 | 8.198 | VV | 875 | 25997 | 0.38% | 0.023% |
| 112 | 8.205 | 8.198 | 8.226 | VV | 575 | 7138 | 0.10% | 0.006% |
| 113 | 8.248 | 8.226 | 8.268 | VV | 590 | 9697 | 0.14% | 0.008% |
| 114 | 8.287 | 8.268 | 8.331 | VV | 538 | 8809 | 0.13% | 0.008% |
| 115 | 8.358 | 8.331 | 8.448 | VV | 3666 | 80620 | 1.19% | 0.070% |
| 116 | 8.471 | 8.448 | 8.490 | VV | 544 | 11910 | 0.18% | 0.010% |
| 117 | 8.511 | 8.490 | 8.530 | VV | 656 | 12138 | 0.18% | 0.011% |
| 118 | 8.544 | 8.530 | 8.578 | VV | 589 | 12179 | 0.18% | 0.011% |
| 119 | 8.592 | 8.578 | 8.632 | VV | 1154 | 20881 | 0.31% | 0.018% |
| 120 | 8.653 | 8.632 | 8.688 | VV | 335 | 6768 | 0.10% | 0.006% |
| 121 | 8.708 | 8.688 | 8.731 | VV | 420 | 6134 | 0.09% | 0.005% |
| 122 | 8.777 | 8.731 | 8.796 | VV | 1474 | 23554 | 0.35% | 0.020% |
| 123 | 8.812 | 8.796 | 8.824 | VV | 922 | 11440 | 0.17% | 0.010% |
| 124 | 8.833 | 8.824 | 8.855 | VV | 648 | 9998 | 0.15% | 0.009% |
| 125 | 8.888 | 8.855 | 8.948 | VV | 2152 | 49076 | 0.72% | 0.043% |
| 126 | 8.963 | 8.948 | 8.985 | VV | 562 | 7555 | 0.11% | 0.007% |
| 127 | 9.011 | 8.985 | 9.043 | VV | 513 | 8303 | 0.12% | 0.007% |
| 128 | 9.065 | 9.043 | 9.077 | VV | 312 | 4013 | 0.06% | 0.003% |
| 129 | 9.122 | 9.077 | 9.147 | VV | 426 | 13195 | 0.19% | 0.011% |
| 130 | 9.174 | 9.147 | 9.218 | VV | 831 | 15325 | 0.23% | 0.013% |
| 131 | 9.244 | 9.218 | 9.274 | VV | 1474 | 24426 | 0.36% | 0.021% |
| 132 | 9.293 | 9.274 | 9.328 | VV | 955 | 14652 | 0.22% | 0.013% |
| 133 | 9.336 | 9.328 | 9.354 | VV | 327 | 3858 | 0.06% | 0.003% |
| 134 | 9.388 | 9.354 | 9.411 | VV | 880 | 16117 | 0.24% | 0.014% |
| 135 | 9.432 | 9.411 | 9.472 | VV | 3042 | 38078 | 0.56% | 0.033% |
| 136 | 9.491 | 9.472 | 9.531 | VV | 304 | 6325 | 0.09% | 0.005% |
| 137 | 9.542 | 9.531 | 9.547 | VV | 217 | 1821 | 0.03% | 0.002% |
| 138 | 9.577 | 9.547 | 9.616 | VV | 637 | 14876 | 0.22% | 0.013% |
| 139 | 9.655 | 9.616 | 9.809 | VV | 582924 | 6443012 | 94.74% | 5.590% |
| 140 | 9.816 | 9.809 | 9.902 | VV | 371 | 11880 | 0.17% | 0.010% |
| 141 | 9.932 | 9.902 | 9.945 | VV | 231 | 4935 | 0.07% | 0.004% |

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|---|---|---|---|---|---|---|---|---|
| 142 | 9.965 | 9.945 | 9.991 | VV | 405 | 7626 | 0.11% | 0.007% |
| 143 | 10.045 | 9.991 | 10.064 | VV | 552 | 15043 | 0.22% | 0.013% |
| 144 | 10.075 | 10.064 | 10.104 | VV | 466 | 7552 | 0.11% | 0.007% |
| 145 | 10.132 | 10.104 | 10.194 | VV | 328 | 11990 | 0.18% | 0.010% |
| 146 | 10.249 | 10.194 | 10.267 | VV | 378 | 9371 | 0.14% | 0.008% |
| 147 | 10.285 | 10.267 | 10.301 | VV | 424 | 5946 | 0.09% | 0.005% |
| 148 | 10.321 | 10.301 | 10.351 | VV | 538 | 11450 | 0.17% | 0.010% |
| 149 | 10.392 | 10.351 | 10.425 | VV | 663 | 17716 | 0.26% | 0.015% |
| 150 | 10.441 | 10.425 | 10.458 | VV | 425 | 6043 | 0.09% | 0.005% |
| 151 | 10.469 | 10.458 | 10.488 | VV | 358 | 5477 | 0.08% | 0.005% |
| 152 | 10.516 | 10.488 | 10.545 | VV | 1026 | 18038 | 0.27% | 0.016% |
| 153 | 10.557 | 10.545 | 10.585 | VV | 286 | 5213 | 0.08% | 0.005% |
| 154 | 10.603 | 10.585 | 10.621 | VV | 252 | 4261 | 0.06% | 0.004% |
| 155 | 10.640 | 10.621 | 10.660 | VV | 196 | 3528 | 0.05% | 0.003% |
| 156 | 10.712 | 10.660 | 10.734 | VV | 336 | 8930 | 0.13% | 0.008% |
| 157 | 10.761 | 10.734 | 10.790 | VV | 365 | 8910 | 0.13% | 0.008% |
| 158 | 10.811 | 10.790 | 10.861 | VV | 589 | 10956 | 0.16% | 0.010% |
| 159 | 10.894 | 10.861 | 10.931 | VV | 1419 | 18488 | 0.27% | 0.016% |
| 160 | 10.967 | 10.931 | 10.991 | VV | 138 | 2181 | 0.03% | 0.002% |
| 161 | 11.021 | 10.991 | 11.050 | PV | 1872 | 24243 | 0.36% | 0.021% |
| 162 | 11.093 | 11.050 | 11.170 | VV | 580810 | 6671816 | 98.10% | 5.788% |
| 163 | 11.182 | 11.170 | 11.223 | VV | 750 | 13273 | 0.20% | 0.012% |
| 164 | 11.244 | 11.223 | 11.260 | VV | 195 | 3616 | 0.05% | 0.003% |
| 165 | 11.285 | 11.260 | 11.358 | VV | 237 | 8007 | 0.12% | 0.007% |
| 166 | 11.404 | 11.358 | 11.455 | VV | 302 | 12323 | 0.18% | 0.011% |
| 167 | 11.478 | 11.455 | 11.528 | VV | 482 | 11270 | 0.17% | 0.010% |
| 168 | 11.549 | 11.528 | 11.594 | VV | 342 | 9367 | 0.14% | 0.008% |
| 169 | 11.610 | 11.594 | 11.634 | VV | 111 | 2326 | 0.03% | 0.002% |
| 170 | 11.751 | 11.634 | 11.784 | VV | 660 | 27357 | 0.40% | 0.024% |
| 171 | 11.798 | 11.784 | 11.824 | VV | 370 | 5560 | 0.08% | 0.005% |
| 172 | 11.846 | 11.824 | 11.874 | VV | 231 | 5481 | 0.08% | 0.005% |
| 173 | 11.894 | 11.874 | 11.930 | VV | 331 | 9067 | 0.13% | 0.008% |
| 174 | 11.971 | 11.930 | 12.009 | VV | 757 | 21949 | 0.32% | 0.019% |
| 175 | 12.029 | 12.009 | 12.052 | VV | 682 | 11399 | 0.17% | 0.010% |
| 176 | 12.070 | 12.052 | 12.138 | VV | 475 | 15630 | 0.23% | 0.014% |
| 177 | 12.221 | 12.138 | 12.311 | VV | 1844 | 54129 | 0.80% | 0.047% |
| 178 | 12.336 | 12.311 | 12.357 | VV | 1213 | 16281 | 0.24% | 0.014% |
| 179 | 12.399 | 12.357 | 12.594 | VV | 561865 | 6800978 | 100.00% | 5.900% |
| 180 | 12.601 | 12.594 | 12.624 | VV | 70 | 1366 | 0.02% | 0.001% |
| 181 | 12.673 | 12.624 | 12.704 | VV | 234 | 7163 | 0.11% | 0.006% |
| 182 | 12.717 | 12.704 | 12.735 | VV | 236 | 2291 | 0.03% | 0.002% |
| 183 | 12.838 | 12.735 | 12.931 | VV | 302568 | 3667462 | 53.93% | 3.182% |
| 184 | 12.948 | 12.931 | 12.963 | VV | 456 | 7614 | 0.11% | 0.007% |
| 185 | 13.010 | 12.963 | 13.168 | VV | 539095 | 6502462 | 95.61% | 5.641% |
| 186 | 13.211 | 13.168 | 13.244 | VV | 404 | 14956 | 0.22% | 0.013% |
| 187 | 13.282 | 13.244 | 13.327 | VV | 521 | 19259 | 0.28% | 0.017% |
| 188 | 13.384 | 13.327 | 13.408 | VV | 779 | 19983 | 0.29% | 0.017% |
| 189 | 13.435 | 13.408 | 13.478 | VV | 1176 | 24907 | 0.37% | 0.022% |
| 190 | 13.539 | 13.478 | 13.558 | VV | 1500 | 28138 | 0.41% | 0.024% |
| 191 | 13.595 | 13.558 | 13.764 | VV | 509448 | 6446362 | 94.79% | 5.593% |
| 192 | 13.837 | 13.764 | 13.871 | VV | 327 | 15756 | 0.23% | 0.014% |
| 193 | 13.884 | 13.871 | 13.899 | VV | 270 | 3904 | 0.06% | 0.003% |
| 194 | 13.918 | 13.899 | 13.950 | VV | 244 | 6452 | 0.09% | 0.006% |

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| 195 | 14.028 | 13.950 | 14.128 | VV | 1094 | 37948 | 0.56% | 0.033% |
| 196 | 14.153 | 14.128 | 14.184 | VV | 577 | 12358 | 0.18% | 0.011% |
| 197 | 14.211 | 14.184 | 14.229 | VV | 335 | 6566 | 0.10% | 0.006% |
| 198 | 14.300 | 14.229 | 14.373 | VV | 432 | 27150 | 0.40% | 0.024% |
| 199 | 14.396 | 14.373 | 14.437 | VV | 321 | 11353 | 0.17% | 0.010% |
| 200 | 14.464 | 14.437 | 14.520 | VV | 340 | 14734 | 0.22% | 0.013% |
| 201 | 14.544 | 14.520 | 14.571 | VV | 389 | 8453 | 0.12% | 0.007% |
| 202 | 14.592 | 14.571 | 14.616 | VV | 367 | 6038 | 0.09% | 0.005% |
| 203 | 14.696 | 14.616 | 14.824 | VV | 491177 | 6311101 | 92.80% | 5.475% |
| 204 | 14.866 | 14.824 | 14.924 | VV | 317 | 9873 | 0.15% | 0.009% |
| 205 | 14.950 | 14.924 | 14.991 | PV | 199 | 5316 | 0.08% | 0.005% |
| 206 | 15.002 | 14.991 | 15.031 | VV | 154 | 2035 | 0.03% | 0.002% |
| 207 | 15.076 | 15.031 | 15.088 | VV | 166 | 2453 | 0.04% | 0.002% |
| 208 | 15.114 | 15.088 | 15.154 | VV | 176 | 4085 | 0.06% | 0.004% |
| 209 | 15.211 | 15.154 | 15.247 | VV | 1181 | 20538 | 0.30% | 0.018% |
| 210 | 15.265 | 15.247 | 15.290 | VV | 172 | 2829 | 0.04% | 0.002% |
| 211 | 15.407 | 15.290 | 15.448 | PV | 203 | 11247 | 0.17% | 0.010% |
| 212 | 15.570 | 15.448 | 15.624 | VV | 306 | 18241 | 0.27% | 0.016% |
| 213 | 15.715 | 15.624 | 15.831 | VV | 475768 | 6171807 | 90.75% | 5.354% |
| 214 | 15.851 | 15.831 | 15.871 | VV | 153 | 3238 | 0.05% | 0.003% |
| 215 | 15.897 | 15.871 | 15.930 | VV | 187 | 4366 | 0.06% | 0.004% |
| 216 | 16.005 | 15.930 | 16.038 | PV | 161 | 5778 | 0.08% | 0.005% |
| 217 | 16.078 | 16.038 | 16.131 | VV | 114 | 4414 | 0.06% | 0.004% |
| 218 | 16.195 | 16.131 | 16.264 | VV | 1742 | 30012 | 0.44% | 0.026% |
| 219 | 16.274 | 16.264 | 16.295 | VV | 170 | 1928 | 0.03% | 0.002% |
| 220 | 16.359 | 16.295 | 16.393 | VV | 215 | 6380 | 0.09% | 0.006% |
| 221 | 16.406 | 16.393 | 16.418 | VV | 117 | 1437 | 0.02% | 0.001% |
| 222 | 16.546 | 16.418 | 16.578 | PV | 376 | 14792 | 0.22% | 0.013% |
| 223 | 16.663 | 16.578 | 16.731 | VV | 451399 | 6063367 | 89.15% | 5.260% |
| 224 | 16.749 | 16.731 | 16.791 | VV | 317 | 7273 | 0.11% | 0.006% |
| 225 | 16.812 | 16.791 | 16.884 | VV | 149 | 3743 | 0.06% | 0.003% |
| 226 | 16.953 | 16.884 | 16.984 | VV | 318 | 6427 | 0.09% | 0.006% |
| 227 | 16.999 | 16.984 | 17.044 | VV | 168 | 3051 | 0.04% | 0.003% |
| 228 | 17.111 | 17.044 | 17.171 | PV | 2514 | 39934 | 0.59% | 0.035% |
| 229 | 17.248 | 17.171 | 17.278 | VV | 174 | 7325 | 0.11% | 0.006% |
| 230 | 17.337 | 17.278 | 17.358 | VV | 245 | 8419 | 0.12% | 0.007% |
| 231 | 17.437 | 17.358 | 17.481 | VV | 4667 | 75858 | 1.12% | 0.066% |
| 232 | 17.550 | 17.481 | 17.613 | VV | 420390 | 6116891 | 89.94% | 5.307% |
| 233 | 17.640 | 17.613 | 17.748 | VV | 430 | 21798 | 0.32% | 0.019% |
| 234 | 17.824 | 17.748 | 17.901 | VV | 400 | 14951 | 0.22% | 0.013% |
| 235 | 17.969 | 17.901 | 18.011 | PV | 3519 | 53311 | 0.78% | 0.046% |
| 236 | 18.139 | 18.011 | 18.186 | VV | 118 | 8759 | 0.13% | 0.008% |
| 237 | 18.274 | 18.186 | 18.311 | PV | 230 | 10952 | 0.16% | 0.010% |
| 238 | 18.382 | 18.311 | 18.471 | VV | 425715 | 6043157 | 88.86% | 5.243% |
| 239 | 18.509 | 18.471 | 18.571 | VV | 202 | 7981 | 0.12% | 0.007% |
| 240 | 18.635 | 18.571 | 18.658 | VV | 182 | 4735 | 0.07% | 0.004% |
| 241 | 18.774 | 18.658 | 18.818 | PV | 3017 | 46839 | 0.69% | 0.041% |
| 242 | 18.956 | 18.818 | 18.987 | VV | 222 | 9175 | 0.13% | 0.008% |
| 243 | 19.164 | 18.987 | 19.249 | PV | 428957 | 5973219 | 87.83% | 5.182% |
| 244 | 19.319 | 19.249 | 19.344 | VV | 528 | 18857 | 0.28% | 0.016% |
| 245 | 19.451 | 19.344 | 19.506 | VV | 3048 | 182426 | 2.68% | 0.158% |
| 246 | 19.533 | 19.506 | 19.613 | VV | 3210 | 102533 | 1.51% | 0.089% |

rteres

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 247 | 19.801 | 19.613 | 19.831 | VV | 1981 | 128535 | 1.89% | 0.112% |
| 248 | 19.903 | 19.831 | 20.003 | VV | 404559 | 5825520 | 85.66% | 5.054% |
| 249 | 20.255 | 20.003 | 20.298 | VV | 3245 | 305181 | 4.49% | 0.265% |
| 250 | 20.428 | 20.298 | 20.481 | VV | 2645 | 253400 | 3.73% | 0.220% |
| 251 | 20.616 | 20.481 | 20.741 | VV | 321516 | 5922266 | 87.08% | 5.138% |
| 252 | 20.765 | 20.741 | 20.831 | VV | 2384 | 124414 | 1.83% | 0.108% |
| 253 | 20.855 | 20.831 | 20.881 | VV | 2229 | 64875 | 0.95% | 0.056% |
| 254 | 20.932 | 20.881 | 20.967 | VV | 2165 | 107428 | 1.58% | 0.093% |
| 255 | 21.011 | 20.967 | 21.070 | VV | 2690 | 133329 | 1.96% | 0.116% |
| 256 | 21.293 | 21.070 | 21.391 | VV | 1949 | 356782 | 5.25% | 0.310% |
| 257 | 21.469 | 21.391 | 21.622 | VV | 233803 | 5573920 | 81.96% | 4.836% |
| 258 | 21.637 | 21.622 | 21.662 | VV | 1272 | 30341 | 0.45% | 0.026% |
| 259 | 21.766 | 21.662 | 21.834 | VV | 1126 | 112158 | 1.65% | 0.097% |
| 260 | 21.847 | 21.834 | 21.888 | VV | 872 | 25623 | 0.38% | 0.022% |
| 261 | 21.983 | 21.888 | 22.051 | VV | 833 | 65515 | 0.96% | 0.057% |
| 262 | 22.066 | 22.051 | 22.224 | VV | 471 | 24734 | 0.36% | 0.021% |

Sum of corrected areas: 115264388

Aliphatic EPH 021125.M Sat Mar 01 01:31:30 2025

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Weston Solutions, Inc. | Date Collected: | 02/24/25 |
| Project: | RFP 905 | Date Received: | 02/24/25 |
| Client Sample ID: | P001-CLAY-CF01-01MSD | SDG No.: | Q1421 |
| Lab Sample ID: | Q1421-03 | Matrix: | Solid |
| Analytical Method: | NJEPH | % Solid: | 70.3 |
| Sample Wt/Vol: | 30.03 Units: g | Final Vol: | 2000 uL |
| Soil Aliquot Vol: | uL | Test: | EPH |
| Prep Method : | | | |

| File ID : | Dilution: | Prep Date : | Date Analyzed : | Prep Batch ID |
|---|---|---|---|---|
| FD049143.D | 1 | 02/27/25 | 02/28/25 | PB166923 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| Aromatic C10-C12 | Aromatic C10-C12 | 9.34 | | 0.43 | 0.95 | mg/kg |
| Aromatic C12-C16 | Aromatic C12-C16 | 16.4 | | 0.48 | 1.42 | mg/kg |
| Aromatic C16-C21 | Aromatic C16-C21 | 34.2 | | 1.36 | 2.37 | mg/kg |
| Aromatic C21-C36 | Aromatic C21-C36 | 55.5 | | 2.84 | 3.79 | mg/kg |
| **SURROGATES** | | | | | | |
| 580-13-2 | 2-Bromonaphthalene (SURR) | 55.9 | | 40 - 140 | 112% | SPK: 50 |
| 321-60-8 | 2-Flurobiphenyl (SURR) | 59.1 | | 40 - 140 | 118% | SPK: 50 |
| 84-15-1 | ortho-Terphenyl (SURR) | 32.0 | | 40 - 140 | 64% | SPK: 50 |

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

# Quantitation Report For Aromatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | Q1421-03 | Acq On: | 28 Feb 2025 19:32 |
| Client Sample ID: | P001-CLAY-CF01-01MSD | Operator: | YP/AJ |
| Data file: | FD049143.D | Misc: | |
| Instrument: | FID_D | ALS Vial: | 72 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aromatic C10-C12 | 4.076 | 5.794 | 15672874 | 98.559 | 200 | ug/ml |
| Aromatic C12-C16 | 5.795 | 8.396 | 27922630 | 173.502 | 300 | ug/ml |
| Aromatic C16-C21 | 8.397 | 12.661 | 55344709 | 360.883 | 500 | ug/ml |
| Aromatic C21-C36 | 12.662 | 18.073 | 83844627 | 585.856 | 800 | ug/ml |
| Aromatic EPH | 4.076 | 18.073 | 182784840 | 1220 | | ug/ml |
| 2-Bromonaphthalene (SURR) | 7.352 | 7.352 | 8004383 | 55.93 | | ug/ml |
| 2-Flurobiphenyl (SURR) | 8.203 | 8.203 | 5197744 | 59.12 | | ug/ml |
| ortho-Terphenyl (SURR) | 11.234 | 11.234 | 5182415 | 32.03 | | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022825AR\
Data File : FD049143.D
Signal(s) : FID2B.ch
Acq On : 28 Feb 2025 19:32
Operator : YP/AJ
Sample : Q1421-03
Misc :
ALS Vial : 72 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF01-01MSD

Integration File: autoint1.e
Quant Time: Mar 01 02:21:41 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

| | Compound | R.T. | Response | Conc Units |
|---|---|---|---|---|
| | **System Monitoring Compounds** | | | |
| 4) | S 2-Bromonaphthalene (S... | 7.352 | 8004383 | 55.932 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 111.86% |
| 6) | S 2-Flurobiphenyl (SURR) | 8.203 | 5197744 | 59.124 ug/ml |
| Spiked Amount | 50.000 Range | 0 - 131 | Recovery = | 118.25% |
| 11) | S ortho-Terphenyl (SURR) | 11.234 | 5182415 | 32.035 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 64.07% |
| | **Target Compounds** | | | |
| 1) | T 1,2,3-Trimethylbenzen... | 4.176 | 6806303 | 42.739 ug/ml |
| 2) | T Naphthalene (C11.7) | 5.693 | 7499718 | 47.231 ug/ml |
| 3) | T 2-Methylnaphthalene (... | 6.739 | 7389966 | 47.465 ug/ml |
| 5) | T Acenaphthylene (C15.06) | 8.005 | 8610669 | 52.954 ug/ml |
| 7) | T Acenaphthene (C15.5) | 8.300 | 9186896 | 55.844 ug/ml |
| 8) | T Flouorene (C16.55) | 9.079 | 9395749 | 59.599 ug/ml |
| 9) | T Phenanthrene (C19.36) | 10.468 | 9704487 | 64.396 ug/ml |
| 10) | T Anthracene (C19.43) | 10.543 | 9855802 | 65.258 ug/ml |
| 12) | T Fluoranthene (C21.85) | 12.273 | 10149905 | 65.774 ug/ml |
| 13) | T Pyrene (C20.8) | 12.566 | 9846593 | 63.915 ug/ml |
| 14) | T Benzo[a]anthracene (C... | 14.437 | 9400442 | 71.546 ug/ml |
| 15) | T Chrysene (C27.41) | 14.479 | 9200670 | 56.904 ug/ml |
| 16) | T benzo[b]fluoranthene ... | 15.987 | 9332863 | 67.829 ug/ml |
| 17) | T Bnezo[k]fluoranthene ... | 16.022 | 9405347 | 59.549 ug/ml |
| 18) | T Benzo[a]pyrene (C31.34) | 16.362 | 9010214 | 66.380 ug/ml |
| 19) | T Indeno[1,2,3-cd]pyren... | 17.734 | 8902747 | 81.470 ug/ml |
| 20) | T Dibenz[a,h]anthracene... | 17.767 | 9038652 | 58.261 ug/ml |
| 21) | T Benzo[g,h,i]perylene ... | 17.984 | 8820594 | 60.852 ug/ml |

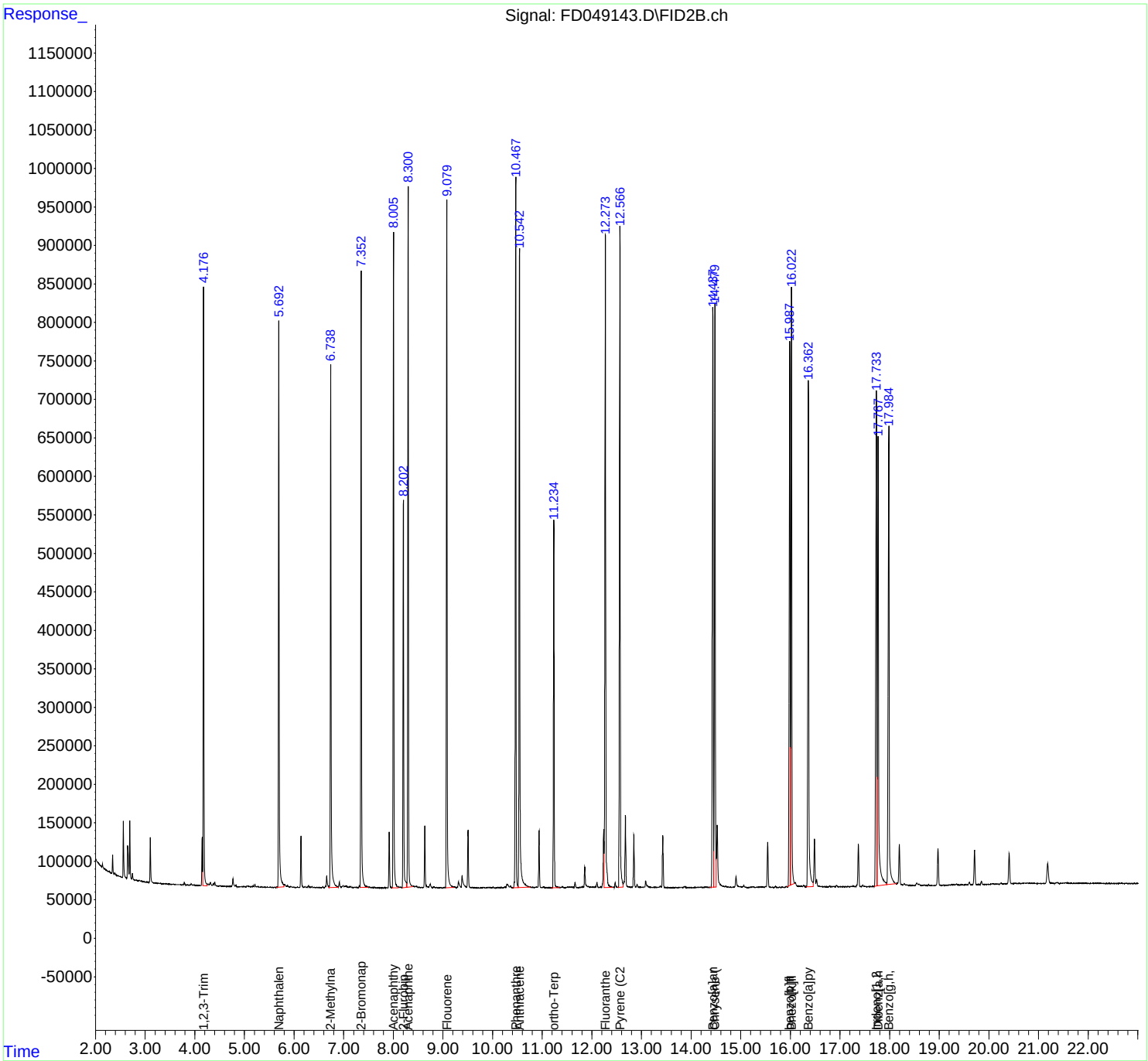
(f)=RT Delta > 1/2 Window (m)=manual int.

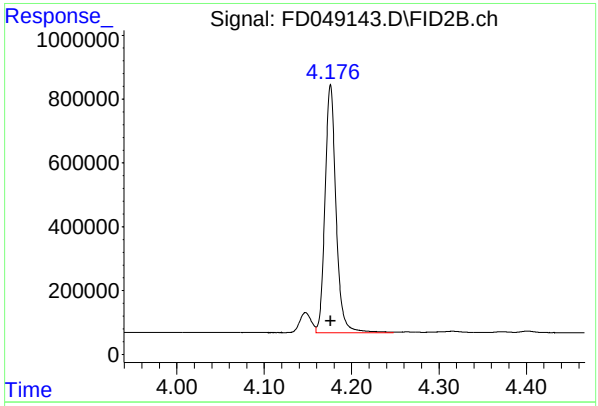
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022825AR\
Data File : FD049143.D
Signal(s) : FID2B.ch
Acq On : 28 Feb 2025 19:32
Operator : YP/AJ
Sample : Q1421-03
Misc :
ALS Vial : 72 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF01-01MSD

Integration File: autoint1.e
Quant Time: Mar 01 02:21:41 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

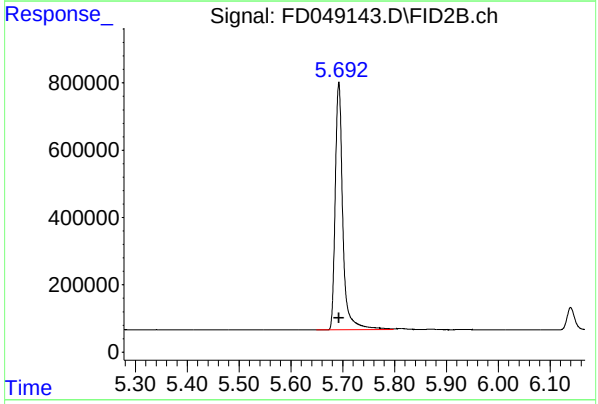





#1 1,2,3-Trimethylbenzene (C10.1)

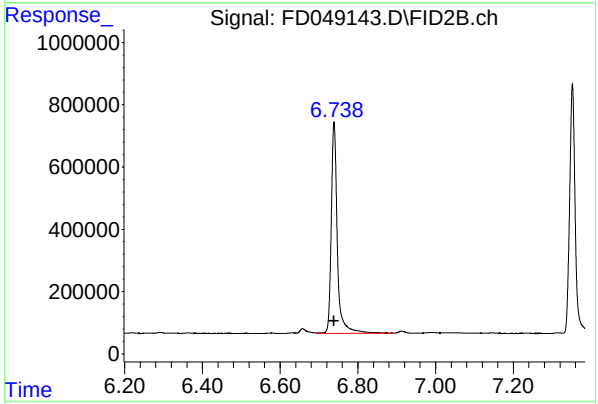
R.T.: 4.176 min
Delta R.T.: 0.000 min
Response: 6806303
Conc: 42.74 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF01-01MSD



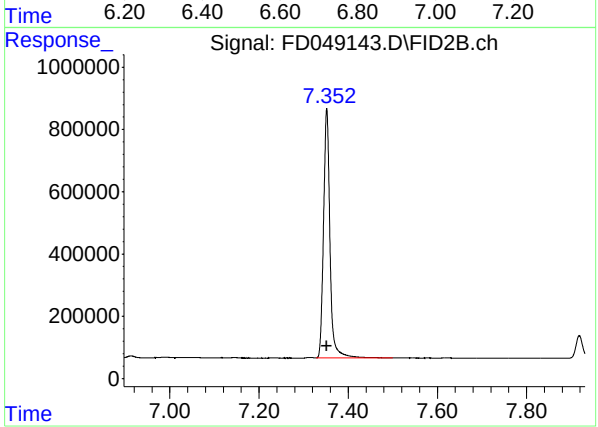

#2 Naphthalene (C11.7)

R.T.: 5.693 min
Delta R.T.: 0.000 min
Response: 7499718
Conc: 47.23 ug/ml



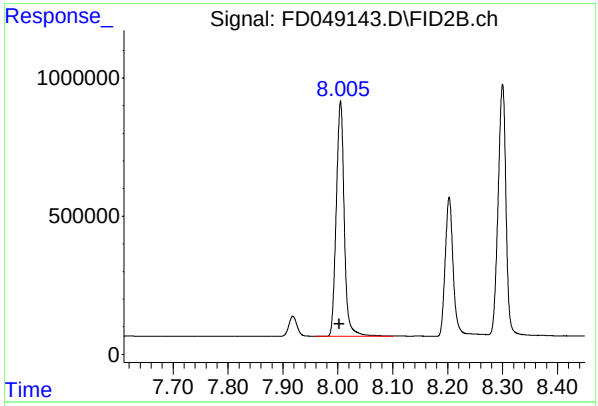

#3 2-Methylnaphthalene (C12.89)

R.T.: 6.739 min
Delta R.T.: 0.000 min
Response: 7389966
Conc: 47.46 ug/ml




#4 2-Bromonaphthalene (SURR)

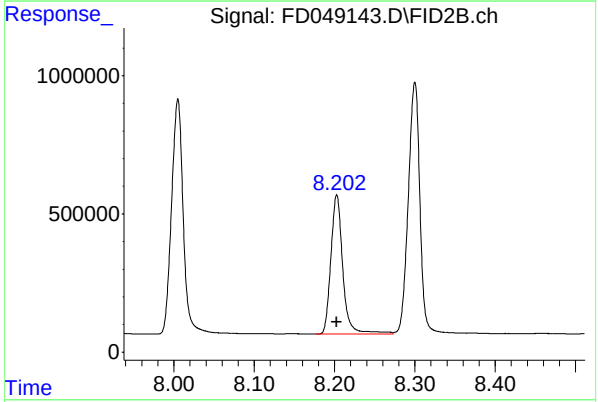
R.T.: 7.352 min
Delta R.T.: 0.000 min
Response: 8004383
Conc: 55.93 ug/ml




#5 Acenaphthylene (C15.06)

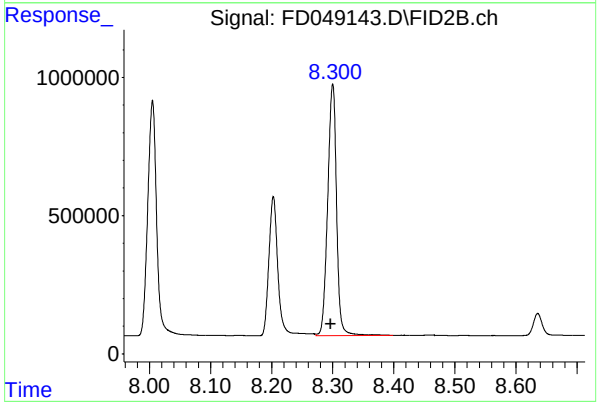
R.T.: 8.005 min
Delta R.T.: 0.002 min
Response: 8610669
Conc: 52.95 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF01-01MSD



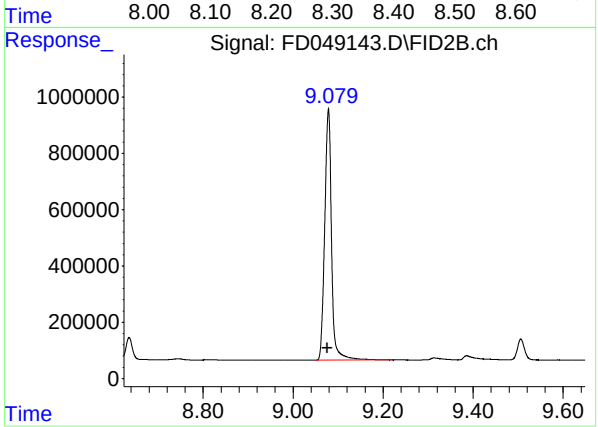

#6 2-Flurobiphenyl (SURR)

R.T.: 8.203 min
Delta R.T.: 0.000 min
Response: 5197744
Conc: 59.12 ug/ml



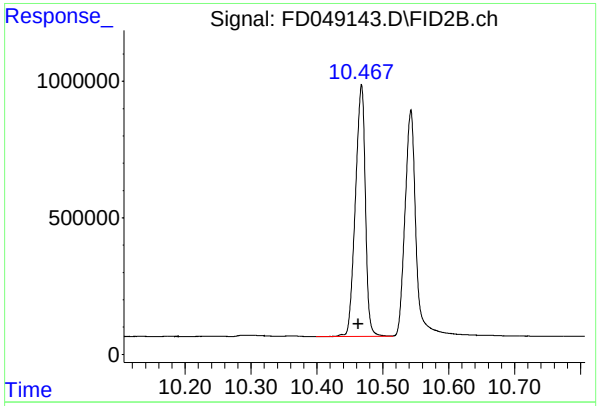

#7 Acenaphthene (C15.5)

R.T.: 8.300 min
Delta R.T.: 0.004 min
Response: 9186896
Conc: 55.84 ug/ml




#8 Flouorene (C16.55)

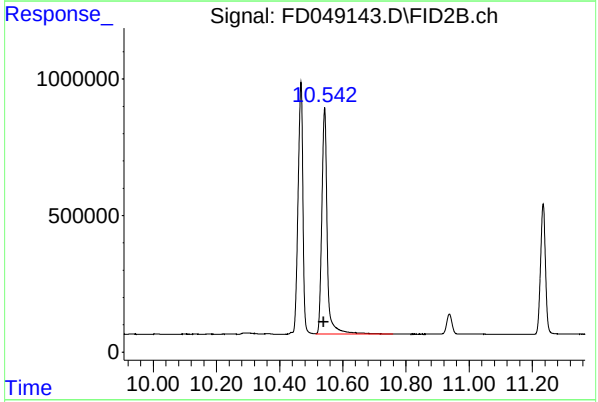
R.T.: 9.079 min
Delta R.T.: 0.003 min
Response: 9395749
Conc: 59.60 ug/ml




#9 Phenanthrene (C19.36)

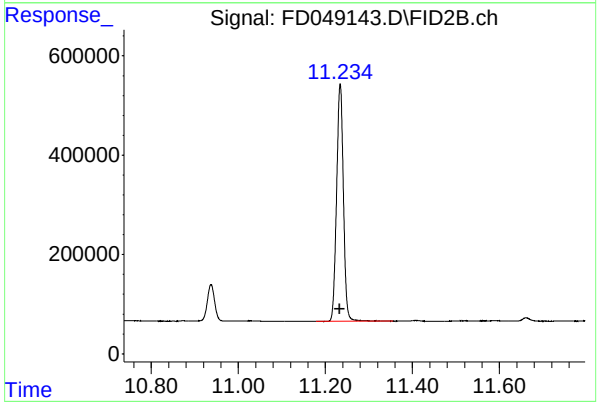
R.T.: 10.468 min
Delta R.T.: 0.005 min
Response: 9704487
Conc: 64.40 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF01-01MSD



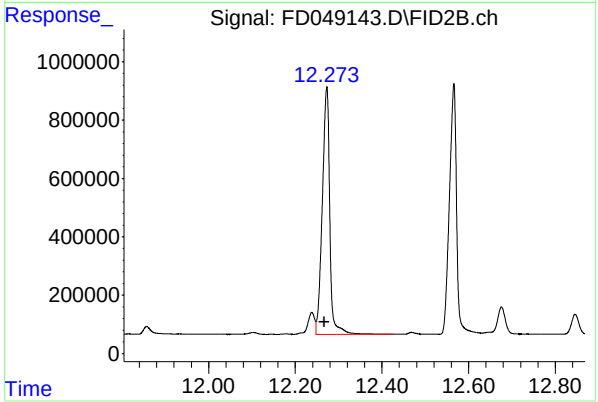

#10 Anthracene (C19.43)

R.T.: 10.543 min
Delta R.T.: 0.003 min
Response: 9855802
Conc: 65.26 ug/ml



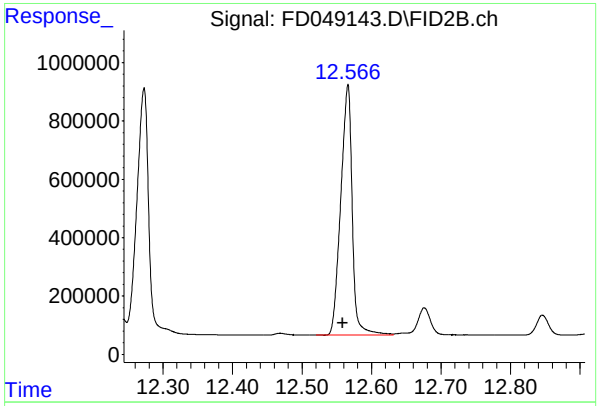

#11 ortho-Terphenyl (SURR)

R.T.: 11.234 min
Delta R.T.: 0.000 min
Response: 5182415
Conc: 32.03 ug/ml




#12 Fluoranthene (C21.85)

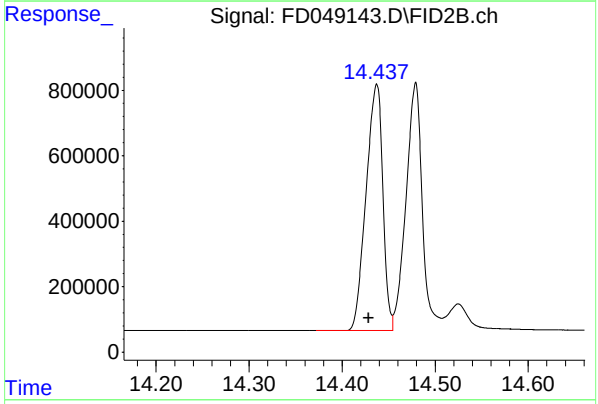
R.T.: 12.273 min
Delta R.T.: 0.006 min
Response: 10149905
Conc: 65.77 ug/ml




#13 Pyrene (C20.8)

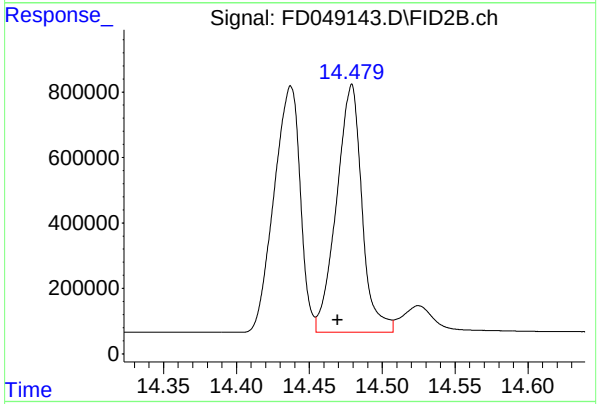
R.T.: 12.566 min
Delta R.T.: 0.008 min
Response: 9846593
Conc: 63.91 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF01-01MSD



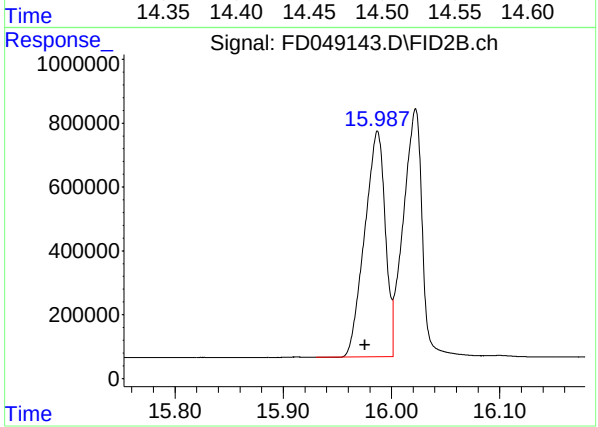

#14 Benzo[a]anthracene (C26.37)

R.T.: 14.437 min
Delta R.T.: 0.009 min
Response: 9400442
Conc: 71.55 ug/ml



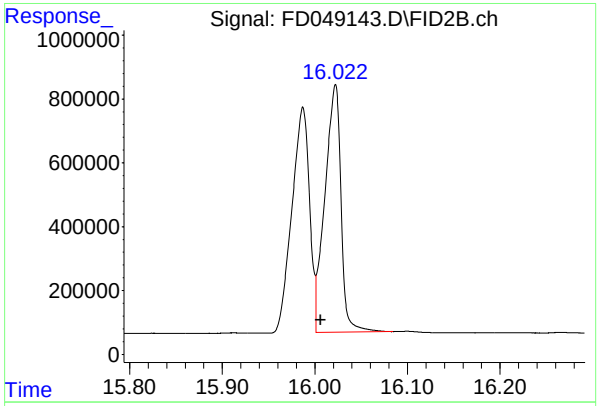

#15 Chrysene (C27.41)

R.T.: 14.479 min
Delta R.T.: 0.010 min
Response: 9200670
Conc: 56.90 ug/ml




#16 benzo[b]fluoranthene (C30.41)

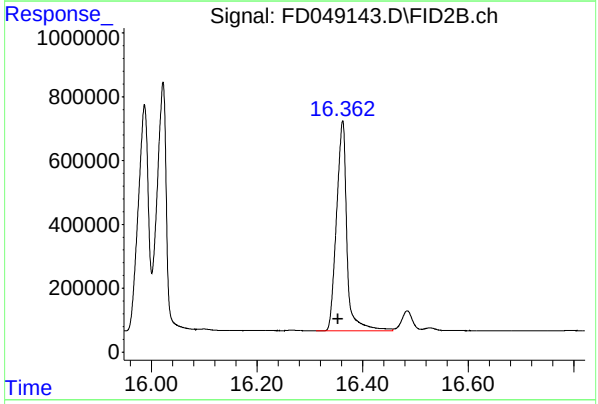
R.T.: 15.987 min
Delta R.T.: 0.012 min
Response: 9332863
Conc: 67.83 ug/ml




#17 Bnezo[k]fluoranthene (C30.14)

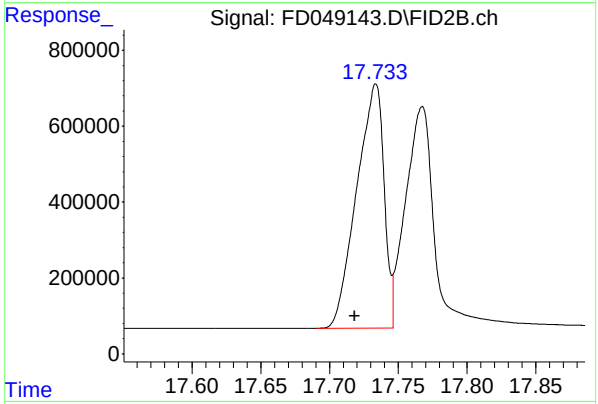
R.T.: 16.022 min
Delta R.T.: 0.016 min
Response: 9405347
Conc: 59.55 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF01-01MSD



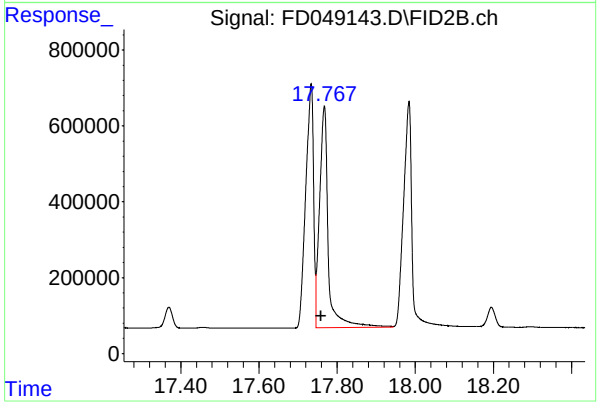

#18 Benzo[a]pyrene (C31.34)

R.T.: 16.362 min
Delta R.T.: 0.009 min
Response: 9010214
Conc: 66.38 ug/ml



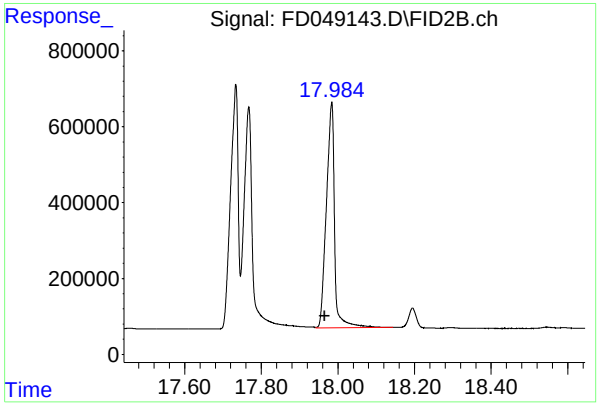

#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.734 min
Delta R.T.: 0.015 min
Response: 8902747
Conc: 81.47 ug/ml




#20 Dibenz[a,h]anthracene (C30.36)

R.T.: 17.767 min
Delta R.T.: 0.008 min
Response: 9038652
Conc: 58.26 ug/ml




#21 Benzo[g,h,i]perylene (C34.01)

R.T.: 17.984 min
Delta R.T.: 0.018 mi
Response: 8820594
Conc: 60.85 ug/m

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF01-01MSD

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022825AR\
Data File : FD049143.D
Signal(s) : FID2B.ch
Acq On : 28 Feb 2025 19:32
Sample : Q1421-03
Misc :
ALS Vial : 72 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Title : GC Extractables

Signal : FID2B.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 4.052 | 4.042 | 4.077 | BV | 152 | 1824 | 0.02% | 0.001% |
| 2 | 4.097 | 4.077 | 4.123 | VV | 200 | 2811 | 0.03% | 0.001% |
| 3 | 4.147 | 4.123 | 4.159 | PV | 63153 | 570838 | 5.59% | 0.282% |
| 4 | 4.176 | 4.159 | 4.247 | VV | 777604 | 6811089 | 66.71% | 3.366% |
| 5 | 4.264 | 4.247 | 4.283 | VV | 2518 | 44255 | 0.43% | 0.022% |
| 6 | 4.316 | 4.283 | 4.354 | VV | 4700 | 97915 | 0.96% | 0.048% |
| 7 | 4.372 | 4.354 | 4.387 | VV | 3581 | 42915 | 0.42% | 0.021% |
| 8 | 4.401 | 4.387 | 4.469 | VV | 5387 | 74932 | 0.73% | 0.037% |
| 9 | 4.491 | 4.469 | 4.498 | VV | 557 | 7223 | 0.07% | 0.004% |
| 10 | 4.514 | 4.498 | 4.544 | VV | 978 | 14805 | 0.14% | 0.007% |
| 11 | 4.549 | 4.544 | 4.557 | VV | 330 | 1801 | 0.02% | 0.001% |
| 12 | 4.561 | 4.557 | 4.570 | VV | 421 | 2357 | 0.02% | 0.001% |
| 13 | 4.583 | 4.570 | 4.593 | VV | 435 | 3298 | 0.03% | 0.002% |
| 14 | 4.608 | 4.593 | 4.617 | VV | 342 | 3178 | 0.03% | 0.002% |
| 15 | 4.624 | 4.617 | 4.642 | VV | 206 | 2250 | 0.02% | 0.001% |
| 16 | 4.648 | 4.642 | 4.660 | VV | 239 | 1291 | 0.01% | 0.001% |
| 17 | 4.666 | 4.660 | 4.673 | PV | 202 | 1068 | 0.01% | 0.001% |
| 18 | 4.689 | 4.673 | 4.709 | VV | 613 | 6780 | 0.07% | 0.003% |
| 19 | 4.714 | 4.709 | 4.725 | VV | 382 | 2486 | 0.02% | 0.001% |
| 20 | 4.769 | 4.725 | 4.811 | VV | 10385 | 149782 | 1.47% | 0.074% |
| 21 | 4.827 | 4.811 | 4.848 | VV | 2278 | 26668 | 0.26% | 0.013% |
| 22 | 4.858 | 4.848 | 4.882 | VV | 430 | 4562 | 0.04% | 0.002% |
| 23 | 4.886 | 4.882 | 4.891 | VV | 241 | 1049 | 0.01% | 0.001% |
| 24 | 4.898 | 4.891 | 4.906 | VV | 230 | 1407 | 0.01% | 0.001% |
| 25 | 4.918 | 4.906 | 4.942 | VV | 220 | 2878 | 0.03% | 0.001% |
| 26 | 4.967 | 4.942 | 5.002 | VV | 677 | 11218 | 0.11% | 0.006% |
| 27 | 5.005 | 5.002 | 5.017 | VV | 305 | 1996 | 0.02% | 0.001% |
| 28 | 5.020 | 5.017 | 5.033 | VV | 386 | 1872 | 0.02% | 0.001% |
| 29 | 5.048 | 5.033 | 5.114 | VV | 1629 | 47163 | 0.46% | 0.023% |
| 30 | 5.134 | 5.114 | 5.151 | VV | 783 | 13240 | 0.13% | 0.007% |
| 31 | 5.177 | 5.151 | 5.195 | VV | 1693 | 25292 | 0.25% | 0.013% |
| 32 | 5.211 | 5.195 | 5.234 | VV | 3795 | 44340 | 0.43% | 0.022% |
| 33 | 5.236 | 5.234 | 5.255 | VV | 718 | 8073 | 0.08% | 0.004% |
| 34 | 5.268 | 5.255 | 5.322 | VV | 1166 | 20586 | 0.20% | 0.010% |
| 35 | 5.340 | 5.322 | 5.351 | VV | 618 | 8137 | 0.08% | 0.004% |
| 36 | 5.358 | 5.351 | 5.380 | VV | 467 | 5563 | 0.05% | 0.003% |

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|---|---|---|---|---|---|---|---|---|
| 37 | 5.383 | 5.380 | 5.406 | VV | 281 | 3514 | 0.03% | 0.002% |
| 38 | 5.411 | 5.406 | 5.435 | VV | 287 | 3793 | 0.04% | 0.002% |
| 39 | 5.461 | 5.444 | 5.494 | VV | 641 | 10403 | 0.10% | 0.005% |
| 40 | 5.517 | 5.494 | 5.550 | VV | 539 | 12495 | 0.12% | 0.006% |
| 41 | 5.556 | 5.550 | 5.575 | VV | 427 | 4592 | 0.04% | 0.002% |
| 42 | 5.581 | 5.575 | 5.595 | VV | 324 | 2879 | 0.03% | 0.001% |
| 43 | 5.607 | 5.595 | 5.618 | VV | 343 | 2915 | 0.03% | 0.001% |
| 44 | 5.641 | 5.618 | 5.669 | PV | 299 | 5438 | 0.05% | 0.003% |
| 45 | 5.693 | 5.669 | 5.800 | VV | 734408 | 7561727 | 74.06% | 3.737% |
| 46 | 5.810 | 5.800 | 5.855 | VV | 4343 | 90069 | 0.88% | 0.045% |
| 47 | 5.872 | 5.855 | 5.907 | VV | 2447 | 49341 | 0.48% | 0.024% |
| 48 | 5.938 | 5.907 | 5.964 | VV | 1474 | 35410 | 0.35% | 0.018% |
| 49 | 5.973 | 5.964 | 5.990 | VV | 652 | 7722 | 0.08% | 0.004% |
| 50 | 5.997 | 5.990 | 6.008 | VV | 560 | 4300 | 0.04% | 0.002% |
| 51 | 6.019 | 6.008 | 6.023 | VV | 471 | 2723 | 0.03% | 0.001% |
| 52 | 6.028 | 6.023 | 6.045 | VV | 418 | 4213 | 0.04% | 0.002% |
| 53 | 6.054 | 6.045 | 6.058 | VV | 468 | 3046 | 0.03% | 0.002% |
| 54 | 6.065 | 6.058 | 6.070 | VV | 486 | 3555 | 0.03% | 0.002% |
| 55 | 6.072 | 6.070 | 6.103 | VV | 590 | 9105 | 0.09% | 0.005% |
| 56 | 6.140 | 6.103 | 6.193 | VV | 67007 | 710905 | 6.96% | 0.351% |
| 57 | 6.200 | 6.193 | 6.205 | VV | 605 | 3527 | 0.03% | 0.002% |
| 58 | 6.221 | 6.205 | 6.243 | VV | 1759 | 21706 | 0.21% | 0.011% |
| 59 | 6.261 | 6.243 | 6.274 | VV | 912 | 10752 | 0.11% | 0.005% |
| 60 | 6.291 | 6.274 | 6.310 | VV | 3067 | 35997 | 0.35% | 0.018% |
| 61 | 6.324 | 6.310 | 6.347 | VV | 1046 | 12714 | 0.12% | 0.006% |
| 62 | 6.362 | 6.347 | 6.399 | VV | 1716 | 21006 | 0.21% | 0.010% |
| 63 | 6.404 | 6.399 | 6.429 | VV | 348 | 4618 | 0.05% | 0.002% |
| 64 | 6.461 | 6.429 | 6.466 | VV | 514 | 6657 | 0.07% | 0.003% |
| 65 | 6.472 | 6.466 | 6.491 | VV | 361 | 3290 | 0.03% | 0.002% |
| 66 | 6.502 | 6.491 | 6.526 | VV | 403 | 5043 | 0.05% | 0.002% |
| 67 | 6.547 | 6.536 | 6.552 | VV | 237 | 1204 | 0.01% | 0.001% |
| 68 | 6.577 | 6.552 | 6.612 | VV | 1315 | 17042 | 0.17% | 0.008% |
| 69 | 6.631 | 6.612 | 6.641 | VV | 1693 | 18622 | 0.18% | 0.009% |
| 70 | 6.658 | 6.641 | 6.692 | VV | 15464 | 194307 | 1.90% | 0.096% |
| 71 | 6.700 | 6.692 | 6.711 | VV | 1758 | 18601 | 0.18% | 0.009% |
| 72 | 6.739 | 6.711 | 6.851 | VV | 679171 | 7383052 | 72.31% | 3.649% |
| 73 | 6.854 | 6.851 | 6.881 | VV | 2477 | 33866 | 0.33% | 0.017% |
| 74 | 6.887 | 6.881 | 6.891 | VV | 1471 | 8334 | 0.08% | 0.004% |
| 75 | 6.913 | 6.891 | 6.949 | VV | 7638 | 108444 | 1.06% | 0.054% |
| 76 | 6.991 | 6.949 | 7.011 | VV | 3213 | 74290 | 0.73% | 0.037% |
| 77 | 7.023 | 7.011 | 7.037 | VV | 2116 | 29343 | 0.29% | 0.015% |
| 78 | 7.058 | 7.037 | 7.082 | VV | 2231 | 44437 | 0.44% | 0.022% |
| 79 | 7.088 | 7.082 | 7.096 | VV | 906 | 7281 | 0.07% | 0.004% |
| 80 | 7.117 | 7.096 | 7.129 | VV | 1542 | 21709 | 0.21% | 0.011% |
| 81 | 7.145 | 7.129 | 7.174 | VV | 1799 | 28489 | 0.28% | 0.014% |
| 82 | 7.177 | 7.174 | 7.190 | VV | 523 | 3784 | 0.04% | 0.002% |
| 83 | 7.197 | 7.190 | 7.201 | VV | 451 | 2479 | 0.02% | 0.001% |
| 84 | 7.207 | 7.201 | 7.216 | VV | 518 | 3999 | 0.04% | 0.002% |
| 85 | 7.232 | 7.216 | 7.250 | VV | 1040 | 14345 | 0.14% | 0.007% |
| 86 | 7.256 | 7.250 | 7.269 | VV | 605 | 6331 | 0.06% | 0.003% |
| 87 | 7.272 | 7.269 | 7.291 | VV | 581 | 4459 | 0.04% | 0.002% |
| 88 | 7.315 | 7.291 | 7.328 | VV | 2492 | 28344 | 0.28% | 0.014% |
| 89 | 7.352 | 7.328 | 7.504 | VV | 801757 | 8084590 | 79.18% | 3.996% |

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|---|---|---|---|---|---|---|---|---|
| 90 | 7.514 | 7.504 | 7.539 | VV | 1114 | 19282 | 0.19% | 0.010% |
| 91 | 7.544 | 7.539 | 7.565 | VV | 777 | 10551 | 0.10% | 0.005% |
| 92 | 7.578 | 7.565 | 7.595 | VV | 802 | 10909 | 0.11% | 0.005% |
| 93 | 7.621 | 7.595 | 7.665 | VV | 1518 | 23244 | 0.23% | 0.011% |
| 94 | 7.678 | 7.665 | 7.691 | VV | 391 | 2936 | 0.03% | 0.001% |
| 95 | 7.702 | 7.691 | 7.737 | VV | 451 | 6081 | 0.06% | 0.003% |
| 96 | 7.750 | 7.737 | 7.774 | PV | 306 | 2740 | 0.03% | 0.001% |
| 97 | 7.792 | 7.785 | 7.803 | PV | 215 | 1206 | 0.01% | 0.001% |
| 98 | 7.832 | 7.803 | 7.851 | VV | 452 | 6992 | 0.07% | 0.003% |
| 99 | 7.859 | 7.851 | 7.873 | VV | 421 | 3328 | 0.03% | 0.002% |
| 100 | 7.918 | 7.873 | 7.959 | VV | 72554 | 765234 | 7.49% | 0.378% |
| 101 | 7.966 | 7.959 | 7.978 | VV | 423 | 4020 | 0.04% | 0.002% |
| 102 | 8.005 | 7.978 | 8.100 | VV | 851882 | 8632702 | 84.55% | 4.267% |
| 103 | 8.113 | 8.100 | 8.135 | VV | 1710 | 25024 | 0.25% | 0.012% |
| 104 | 8.148 | 8.135 | 8.177 | VV | 1404 | 20232 | 0.20% | 0.010% |
| 105 | 8.203 | 8.177 | 8.273 | VV | 503940 | 5226608 | 51.19% | 2.583% |
| 106 | 8.300 | 8.273 | 8.374 | VV | 912589 | 9249942 | 90.59% | 4.572% |
| 107 | 8.375 | 8.374 | 8.398 | VV | 3521 | 39746 | 0.39% | 0.020% |
| 108 | 8.407 | 8.398 | 8.440 | VV | 2046 | 46801 | 0.46% | 0.023% |
| 109 | 8.458 | 8.440 | 8.492 | VV | 2464 | 56965 | 0.56% | 0.028% |
| 110 | 8.497 | 8.492 | 8.504 | VV | 841 | 5350 | 0.05% | 0.003% |
| 111 | 8.516 | 8.504 | 8.540 | VV | 1431 | 19998 | 0.20% | 0.010% |
| 112 | 8.564 | 8.540 | 8.597 | VV | 1002 | 22135 | 0.22% | 0.011% |
| 113 | 8.636 | 8.597 | 8.712 | VV | 80870 | 885631 | 8.67% | 0.438% |
| 114 | 8.745 | 8.712 | 8.786 | VV | 5378 | 105642 | 1.03% | 0.052% |
| 115 | 8.819 | 8.786 | 8.850 | VV | 1807 | 37017 | 0.36% | 0.018% |
| 116 | 8.871 | 8.850 | 8.898 | VV | 888 | 13799 | 0.14% | 0.007% |
| 117 | 8.908 | 8.898 | 8.921 | VV | 423 | 3912 | 0.04% | 0.002% |
| 118 | 8.946 | 8.921 | 8.957 | VV | 673 | 10071 | 0.10% | 0.005% |
| 119 | 8.961 | 8.957 | 8.970 | VV | 561 | 3299 | 0.03% | 0.002% |
| 120 | 8.974 | 8.970 | 8.990 | VV | 413 | 3165 | 0.03% | 0.002% |
| 121 | 9.018 | 8.999 | 9.026 | VV | 804 | 9065 | 0.09% | 0.004% |
| 122 | 9.032 | 9.026 | 9.037 | VV | 779 | 4178 | 0.04% | 0.002% |
| 123 | 9.041 | 9.037 | 9.051 | VV | 778 | 4913 | 0.05% | 0.002% |
| 124 | 9.079 | 9.051 | 9.222 | VV | 893730 | 9456631 | 92.62% | 4.674% |
| 125 | 9.236 | 9.222 | 9.269 | VV | 1541 | 31863 | 0.31% | 0.016% |
| 126 | 9.314 | 9.269 | 9.370 | VV | 8137 | 183643 | 1.80% | 0.091% |
| 127 | 9.386 | 9.370 | 9.478 | VV | 15973 | 356742 | 3.49% | 0.176% |
| 128 | 9.506 | 9.478 | 9.553 | VV | 75343 | 848602 | 8.31% | 0.419% |
| 129 | 9.557 | 9.553 | 9.569 | VV | 789 | 6282 | 0.06% | 0.003% |
| 130 | 9.592 | 9.569 | 9.641 | VV | 976 | 29599 | 0.29% | 0.015% |
| 131 | 9.649 | 9.641 | 9.670 | VV | 490 | 4976 | 0.05% | 0.002% |
| 132 | 9.685 | 9.670 | 9.707 | VV | 401 | 5380 | 0.05% | 0.003% |
| 133 | 9.779 | 9.730 | 9.796 | PV | 561 | 13417 | 0.13% | 0.007% |
| 134 | 9.822 | 9.796 | 9.843 | VV | 980 | 16641 | 0.16% | 0.008% |
| 135 | 9.857 | 9.843 | 9.863 | VV | 375 | 3626 | 0.04% | 0.002% |
| 136 | 9.877 | 9.863 | 9.885 | VV | 641 | 6582 | 0.06% | 0.003% |
| 137 | 9.900 | 9.885 | 9.915 | VV | 939 | 12077 | 0.12% | 0.006% |
| 138 | 9.932 | 9.915 | 9.957 | VV | 973 | 16847 | 0.16% | 0.008% |
| 139 | 9.976 | 9.957 | 9.989 | VV | 517 | 8146 | 0.08% | 0.004% |
| 140 | 10.010 | 9.989 | 10.036 | VV | 1599 | 19088 | 0.19% | 0.009% |
| 141 | 10.049 | 10.036 | 10.057 | VV | 322 | 3092 | 0.03% | 0.002% |

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|---|---|---|---|---|---|---|---|---|
| 142 | 10.060 | 10.057 | 10.072 | VV | 316 | 2204 | 0.02% | 0.001% |
| 143 | 10.097 | 10.072 | 10.119 | VV | 870 | 16240 | 0.16% | 0.008% |
| 144 | 10.131 | 10.119 | 10.158 | VV | 927 | 12583 | 0.12% | 0.006% |
| 145 | 10.173 | 10.158 | 10.204 | VV | 1017 | 16348 | 0.16% | 0.008% |
| 146 | 10.241 | 10.204 | 10.245 | VV | 1242 | 19318 | 0.19% | 0.010% |
| 147 | 10.250 | 10.245 | 10.270 | VV | 1326 | 14116 | 0.14% | 0.007% |
| 148 | 10.288 | 10.270 | 10.294 | VV | 5085 | 44328 | 0.43% | 0.022% |
| 149 | 10.301 | 10.294 | 10.343 | VV | 4770 | 90742 | 0.89% | 0.045% |
| 150 | 10.362 | 10.343 | 10.402 | VV | 2787 | 46194 | 0.45% | 0.023% |
| 151 | 10.468 | 10.402 | 10.515 | VV | 919186 | 9737893 | 95.37% | 4.813% |
| 152 | 10.543 | 10.515 | 10.649 | VV | 826412 | 9821537 | 96.19% | 4.854% |
| 153 | 10.655 | 10.649 | 10.735 | VV | 5155 | 158646 | 1.55% | 0.078% |
| 154 | 10.739 | 10.735 | 10.745 | VV | 1684 | 9348 | 0.09% | 0.005% |
| 155 | 10.751 | 10.745 | 10.787 | VV | 1663 | 31644 | 0.31% | 0.016% |
| 156 | 10.802 | 10.787 | 10.847 | VV | 1009 | 26408 | 0.26% | 0.013% |
| 157 | 10.850 | 10.847 | 10.856 | VV | 666 | 3532 | 0.03% | 0.002% |
| 158 | 10.873 | 10.856 | 10.886 | VV | 1434 | 18259 | 0.18% | 0.009% |
| 159 | 10.891 | 10.886 | 10.900 | VV | 1164 | 8827 | 0.09% | 0.004% |
| 160 | 10.937 | 10.900 | 10.976 | VV | 74543 | 880787 | 8.63% | 0.435% |
| 161 | 10.993 | 10.976 | 11.007 | VV | 990 | 15777 | 0.15% | 0.008% |
| 162 | 11.028 | 11.007 | 11.088 | VV | 1310 | 34538 | 0.34% | 0.017% |
| 163 | 11.093 | 11.088 | 11.105 | VV | 424 | 2973 | 0.03% | 0.001% |
| 164 | 11.119 | 11.105 | 11.126 | VV | 366 | 3726 | 0.04% | 0.002% |
| 165 | 11.134 | 11.126 | 11.140 | VV | 371 | 2645 | 0.03% | 0.001% |
| 166 | 11.152 | 11.140 | 11.175 | VV | 460 | 6598 | 0.06% | 0.003% |
| 167 | 11.179 | 11.175 | 11.187 | VV | 226 | 1405 | 0.01% | 0.001% |
| 168 | 11.234 | 11.200 | 11.309 | PV | 478016 | 5197562 | 50.90% | 2.569% |
| 169 | 11.323 | 11.309 | 11.340 | VV | 1206 | 18645 | 0.18% | 0.009% |
| 170 | 11.343 | 11.340 | 11.364 | VV | 803 | 9899 | 0.10% | 0.005% |
| 171 | 11.372 | 11.364 | 11.378 | VV | 984 | 6608 | 0.06% | 0.003% |
| 172 | 11.407 | 11.378 | 11.435 | VV | 1922 | 37632 | 0.37% | 0.019% |
| 173 | 11.443 | 11.435 | 11.457 | VV | 448 | 4843 | 0.05% | 0.002% |
| 174 | 11.463 | 11.457 | 11.475 | VV | 340 | 3115 | 0.03% | 0.002% |
| 175 | 11.509 | 11.475 | 11.513 | VV | 1111 | 17109 | 0.17% | 0.008% |
| 176 | 11.522 | 11.513 | 11.552 | VV | 1204 | 24381 | 0.24% | 0.012% |
| 177 | 11.561 | 11.552 | 11.576 | VV | 1182 | 15808 | 0.15% | 0.008% |
| 178 | 11.588 | 11.576 | 11.616 | VV | 1425 | 27110 | 0.27% | 0.013% |
| 179 | 11.629 | 11.616 | 11.635 | VV | 827 | 8822 | 0.09% | 0.004% |
| 180 | 11.661 | 11.635 | 11.694 | VV | 7342 | 100043 | 0.98% | 0.049% |
| 181 | 11.705 | 11.694 | 11.721 | VV | 574 | 7697 | 0.08% | 0.004% |
| 182 | 11.731 | 11.721 | 11.749 | VV | 827 | 11893 | 0.12% | 0.006% |
| 183 | 11.755 | 11.749 | 11.779 | VV | 959 | 12231 | 0.12% | 0.006% |
| 184 | 11.816 | 11.779 | 11.837 | VV | 1893 | 42894 | 0.42% | 0.021% |
| 185 | 11.857 | 11.837 | 11.920 | VV | 27368 | 392477 | 3.84% | 0.194% |
| 186 | 11.932 | 11.920 | 11.959 | VV | 1876 | 34073 | 0.33% | 0.017% |
| 187 | 11.974 | 11.959 | 11.996 | VV | 1358 | 24934 | 0.24% | 0.012% |
| 188 | 12.009 | 11.996 | 12.035 | VV | 1284 | 24418 | 0.24% | 0.012% |
| 189 | 12.037 | 12.035 | 12.046 | VV | 929 | 4808 | 0.05% | 0.002% |
| 190 | 12.103 | 12.046 | 12.135 | VV | 7193 | 127813 | 1.25% | 0.063% |
| 191 | 12.147 | 12.135 | 12.159 | VV | 773 | 8543 | 0.08% | 0.004% |
| 192 | 12.179 | 12.159 | 12.196 | VV | 2052 | 26567 | 0.26% | 0.013% |
| 193 | 12.238 | 12.196 | 12.248 | VV | 76301 | 831869 | 8.15% | 0.411% |
| 194 | 12.273 | 12.248 | 12.417 | VV | 852748 | 10210561 | 100.00% | 5.046% |

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|---|---|---|---|---|---|---|---|---|
| 195 | 12.419 | 12.417 | 12.425 | VV | 779 | 3495 | 0.03% | 0.002% |
| 196 | 12.440 | 12.425 | 12.448 | VV | 855 | 11371 | 0.11% | 0.006% |
| 197 | 12.468 | 12.448 | 12.515 | VV | 7122 | 103350 | 1.01% | 0.051% |
| 198 | 12.518 | 12.515 | 12.532 | VV | 803 | 7169 | 0.07% | 0.004% |
| 199 | 12.566 | 12.532 | 12.631 | VV | 865346 | 9902740 | 96.99% | 4.894% |
| 200 | 12.676 | 12.631 | 12.730 | VV | 94615 | 1298259 | 12.71% | 0.642% |
| 201 | 12.736 | 12.730 | 12.792 | VV | 1642 | 42454 | 0.42% | 0.021% |
| 202 | 12.846 | 12.792 | 12.885 | VV | 69040 | 849874 | 8.32% | 0.420% |
| 203 | 12.910 | 12.885 | 12.944 | VV | 4519 | 73734 | 0.72% | 0.036% |
| 204 | 12.961 | 12.944 | 12.969 | VV | 927 | 11854 | 0.12% | 0.006% |
| 205 | 12.974 | 12.969 | 12.977 | VV | 822 | 3842 | 0.04% | 0.002% |
| 206 | 12.989 | 12.977 | 13.007 | VV | 939 | 13626 | 0.13% | 0.007% |
| 207 | 13.012 | 13.007 | 13.016 | VV | 695 | 3494 | 0.03% | 0.002% |
| 208 | 13.042 | 13.016 | 13.062 | VV | 1107 | 24265 | 0.24% | 0.012% |
| 209 | 13.084 | 13.062 | 13.154 | VV | 9048 | 187617 | 1.84% | 0.093% |
| 210 | 13.161 | 13.154 | 13.168 | VV | 949 | 6925 | 0.07% | 0.003% |
| 211 | 13.176 | 13.168 | 13.216 | VV | 1013 | 21493 | 0.21% | 0.011% |
| 212 | 13.224 | 13.216 | 13.239 | VV | 725 | 8146 | 0.08% | 0.004% |
| 213 | 13.260 | 13.239 | 13.265 | VV | 918 | 12031 | 0.12% | 0.006% |
| 214 | 13.269 | 13.265 | 13.284 | VV | 825 | 8548 | 0.08% | 0.004% |
| 215 | 13.291 | 13.284 | 13.297 | VV | 823 | 5566 | 0.05% | 0.003% |
| 216 | 13.303 | 13.297 | 13.315 | VV | 782 | 6736 | 0.07% | 0.003% |
| 217 | 13.336 | 13.315 | 13.348 | VV | 839 | 12204 | 0.12% | 0.006% |
| 218 | 13.383 | 13.348 | 13.402 | VV | 2198 | 40734 | 0.40% | 0.020% |
| 219 | 13.429 | 13.402 | 13.476 | VV | 68084 | 826651 | 8.10% | 0.409% |
| 220 | 13.484 | 13.476 | 13.506 | VV | 417 | 6082 | 0.06% | 0.003% |
| 221 | 13.536 | 13.506 | 13.543 | VV | 467 | 7707 | 0.08% | 0.004% |
| 222 | 13.550 | 13.543 | 13.560 | VV | 326 | 2244 | 0.02% | 0.001% |
| 223 | 13.574 | 13.570 | 13.587 | VV | 254 | 1198 | 0.01% | 0.001% |
| 224 | 13.601 | 13.593 | 13.606 | VV | 227 | 1141 | 0.01% | 0.001% |
| 225 | 13.621 | 13.613 | 13.645 | PV | 96 | 1363 | 0.01% | 0.001% |
| 226 | 13.662 | 13.652 | 13.668 | VV | 326 | 1699 | 0.02% | 0.001% |
| 227 | 13.686 | 13.675 | 13.694 | VV | 308 | 2352 | 0.02% | 0.001% |
| 228 | 13.700 | 13.694 | 13.712 | VV | 279 | 1992 | 0.02% | 0.001% |
| 229 | 13.722 | 13.712 | 13.733 | VV | 292 | 2331 | 0.02% | 0.001% |
| 230 | 13.743 | 13.733 | 13.752 | VV | 196 | 1655 | 0.02% | 0.001% |
| 231 | 13.761 | 13.752 | 13.765 | VV | 288 | 1903 | 0.02% | 0.001% |
| 232 | 13.771 | 13.765 | 13.795 | VV | 412 | 4892 | 0.05% | 0.002% |
| 233 | 13.799 | 13.795 | 13.806 | VV | 293 | 1486 | 0.01% | 0.001% |
| 234 | 13.828 | 13.806 | 13.835 | VV | 532 | 5605 | 0.05% | 0.003% |
| 235 | 13.868 | 13.835 | 13.896 | VV | 1781 | 35299 | 0.35% | 0.017% |
| 236 | 13.900 | 13.896 | 13.929 | VV | 442 | 6777 | 0.07% | 0.003% |
| 237 | 13.959 | 13.929 | 13.975 | PV | 374 | 5501 | 0.05% | 0.003% |
| 238 | 13.992 | 13.975 | 14.012 | VV | 364 | 4836 | 0.05% | 0.002% |
| 239 | 14.024 | 14.012 | 14.042 | VV | 292 | 3511 | 0.03% | 0.002% |
| 240 | 14.047 | 14.042 | 14.051 | VV | 222 | 1088 | 0.01% | 0.001% |
| 241 | 14.057 | 14.051 | 14.068 | VV | 476 | 2482 | 0.02% | 0.001% |
| 242 | 14.092 | 14.068 | 14.113 | VV | 534 | 9723 | 0.10% | 0.005% |
| 243 | 14.128 | 14.113 | 14.140 | VV | 723 | 8637 | 0.08% | 0.004% |
| 244 | 14.156 | 14.140 | 14.167 | VV | 685 | 8714 | 0.09% | 0.004% |
| 245 | 14.171 | 14.167 | 14.179 | VV | 474 | 3369 | 0.03% | 0.002% |
| 246 | 14.190 | 14.179 | 14.199 | VV | 635 | 5945 | 0.06% | 0.003% |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 247 | 14.201 | 14.199 | 14.207 | VV | 547 | 2494 | 0.02% | 0.001% |
| 248 | 14.211 | 14.207 | 14.234 | VV | 560 | 6331 | 0.06% | 0.003% |
| 249 | 14.246 | 14.234 | 14.271 | VV | 563 | 8422 | 0.08% | 0.004% |
| 250 | 14.301 | 14.271 | 14.319 | VV | 725 | 14645 | 0.14% | 0.007% |
| 251 | 14.330 | 14.319 | 14.358 | VV | 770 | 13114 | 0.13% | 0.006% |
| 252 | 14.371 | 14.358 | 14.387 | VV | 495 | 7583 | 0.07% | 0.004% |
| 253 | 14.392 | 14.387 | 14.399 | VV | 464 | 2475 | 0.02% | 0.001% |
| 254 | 14.437 | 14.399 | 14.455 | VV | 753429 | 9421292 | 92.27% | 4.656% |
| 255 | 14.479 | 14.455 | 14.507 | VV | 755607 | 9223421 | 90.33% | 4.559% |
| 256 | 14.525 | 14.507 | 14.666 | VV | 81419 | 1467633 | 14.37% | 0.725% |
| 257 | 14.670 | 14.666 | 14.676 | VV | 1500 | 7995 | 0.08% | 0.004% |
| 258 | 14.698 | 14.676 | 14.735 | VV | 1845 | 47661 | 0.47% | 0.024% |
| 259 | 14.740 | 14.735 | 14.764 | VV | 1034 | 14225 | 0.14% | 0.007% |
| 260 | 14.769 | 14.764 | 14.789 | VV | 757 | 9427 | 0.09% | 0.005% |
| 261 | 14.798 | 14.789 | 14.816 | VV | 620 | 8364 | 0.08% | 0.004% |
| 262 | 14.832 | 14.816 | 14.853 | VV | 783 | 13629 | 0.13% | 0.007% |
| 263 | 14.867 | 14.853 | 14.871 | VV | 681 | 6814 | 0.07% | 0.003% |
| 264 | 14.903 | 14.871 | 14.975 | VV | 14292 | 272159 | 2.67% | 0.135% |
| 265 | 14.981 | 14.975 | 15.017 | VV | 1413 | 28794 | 0.28% | 0.014% |
| 266 | 15.060 | 15.017 | 15.081 | VV | 2602 | 53162 | 0.52% | 0.026% |
| 267 | 15.087 | 15.081 | 15.096 | VV | 737 | 5700 | 0.06% | 0.003% |
| 268 | 15.105 | 15.096 | 15.120 | VV | 716 | 5931 | 0.06% | 0.003% |
| 269 | 15.126 | 15.120 | 15.137 | VV | 302 | 1937 | 0.02% | 0.001% |
| 270 | 15.147 | 15.137 | 15.165 | VV | 315 | 3066 | 0.03% | 0.002% |
| 271 | 15.175 | 15.165 | 15.185 | VV | 413 | 3612 | 0.04% | 0.002% |
| 272 | 15.242 | 15.185 | 15.260 | VV | 1271 | 28512 | 0.28% | 0.014% |
| 273 | 15.264 | 15.260 | 15.274 | VV | 664 | 4142 | 0.04% | 0.002% |
| 274 | 15.275 | 15.274 | 15.286 | VV | 493 | 2798 | 0.03% | 0.001% |
| 275 | 15.288 | 15.286 | 15.295 | VV | 401 | 1705 | 0.02% | 0.001% |
| 276 | 15.319 | 15.295 | 15.327 | VV | 506 | 7068 | 0.07% | 0.003% |
| 277 | 15.338 | 15.327 | 15.345 | VV | 665 | 5002 | 0.05% | 0.002% |
| 278 | 15.352 | 15.345 | 15.357 | VV | 639 | 4055 | 0.04% | 0.002% |
| 279 | 15.361 | 15.357 | 15.368 | VV | 621 | 3422 | 0.03% | 0.002% |
| 280 | 15.388 | 15.368 | 15.394 | VV | 734 | 9750 | 0.10% | 0.005% |
| 281 | 15.397 | 15.394 | 15.408 | VV | 869 | 5906 | 0.06% | 0.003% |
| 282 | 15.420 | 15.408 | 15.467 | VV | 819 | 24666 | 0.24% | 0.012% |
| 283 | 15.504 | 15.467 | 15.512 | VV | 1496 | 23618 | 0.23% | 0.012% |
| 284 | 15.542 | 15.512 | 15.576 | VV | 59045 | 774946 | 7.59% | 0.383% |
| 285 | 15.584 | 15.576 | 15.618 | VV | 716 | 13705 | 0.13% | 0.007% |
| 286 | 15.633 | 15.618 | 15.654 | VV | 450 | 5322 | 0.05% | 0.003% |
| 287 | 15.660 | 15.654 | 15.678 | VV | 237 | 1702 | 0.02% | 0.001% |
| 288 | 15.699 | 15.678 | 15.745 | VV | 1497 | 21848 | 0.21% | 0.011% |
| 289 | 15.747 | 15.745 | 15.777 | VV | 327 | 3844 | 0.04% | 0.002% |
| 290 | 15.784 | 15.777 | 15.793 | VV | 436 | 2429 | 0.02% | 0.001% |
| 291 | 15.805 | 15.793 | 15.813 | VV | 341 | 2646 | 0.03% | 0.001% |
| 292 | 15.827 | 15.813 | 15.856 | VV | 465 | 7662 | 0.08% | 0.004% |
| 293 | 15.863 | 15.856 | 15.874 | VV | 241 | 2324 | 0.02% | 0.001% |
| 294 | 15.913 | 15.874 | 15.949 | VV | 1507 | 34267 | 0.34% | 0.017% |
| 295 | 15.987 | 15.949 | 16.001 | VV | 709435 | 9405943 | 92.12% | 4.649% |
| 296 | 16.022 | 16.001 | 16.084 | VV | 779727 | 9614362 | 94.16% | 4.752% |
| 297 | 16.099 | 16.084 | 16.137 | VV | 6515 | 135808 | 1.33% | 0.067% |
| 298 | 16.141 | 16.137 | 16.174 | VV | 2011 | 38155 | 0.37% | 0.019% |
| 299 | 16.180 | 16.174 | 16.186 | VV | 1603 | 11122 | 0.11% | 0.005% |

rteres

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 300 | 16.191 | 16.186 | 16.205 | VV | 1655 | 17622 | 0.17% | 0.009% |
| 301 | 16.220 | 16.205 | 16.248 | VV | 1716 | 38866 | 0.38% | 0.019% |
| 302 | 16.266 | 16.248 | 16.299 | VV | 3050 | 55816 | 0.55% | 0.028% |
| 303 | 16.302 | 16.299 | 16.314 | VV | 1126 | 8630 | 0.08% | 0.004% |
| 304 | 16.362 | 16.314 | 16.458 | VV | 658504 | 9102311 | 89.15% | 4.499% |
| 305 | 16.485 | 16.458 | 16.512 | VV | 63370 | 924994 | 9.06% | 0.457% |
| 306 | 16.528 | 16.512 | 16.561 | VV | 10257 | 168263 | 1.65% | 0.083% |
| 307 | 16.565 | 16.561 | 16.617 | VV | 2021 | 51064 | 0.50% | 0.025% |
| 308 | 16.622 | 16.617 | 16.657 | VV | 1167 | 23795 | 0.23% | 0.012% |
| 309 | 16.665 | 16.657 | 16.675 | VV | 845 | 8655 | 0.08% | 0.004% |
| 310 | 16.681 | 16.675 | 16.683 | VV | 740 | 3579 | 0.04% | 0.002% |
| 311 | 16.697 | 16.683 | 16.718 | VV | 996 | 17435 | 0.17% | 0.009% |
| 312 | 16.723 | 16.718 | 16.725 | VV | 769 | 3414 | 0.03% | 0.002% |
| 313 | 16.730 | 16.725 | 16.737 | VV | 818 | 5004 | 0.05% | 0.002% |
| 314 | 16.739 | 16.737 | 16.750 | VV | 708 | 4898 | 0.05% | 0.002% |
| 315 | 16.753 | 16.750 | 16.765 | VV | 781 | 5759 | 0.06% | 0.003% |
| 316 | 16.795 | 16.765 | 16.828 | VV | 1794 | 42802 | 0.42% | 0.021% |
| 317 | 16.855 | 16.828 | 16.900 | VV | 1463 | 43524 | 0.43% | 0.022% |
| 318 | 16.932 | 16.900 | 16.997 | VV | 2508 | 67778 | 0.66% | 0.033% |
| 319 | 17.012 | 16.997 | 17.044 | VV | 989 | 23107 | 0.23% | 0.011% |
| 320 | 17.049 | 17.044 | 17.078 | VV | 931 | 16940 | 0.17% | 0.008% |
| 321 | 17.083 | 17.078 | 17.096 | VV | 843 | 7437 | 0.07% | 0.004% |
| 322 | 17.113 | 17.096 | 17.125 | VV | 884 | 13431 | 0.13% | 0.007% |
| 323 | 17.144 | 17.125 | 17.154 | VV | 860 | 13634 | 0.13% | 0.007% |
| 324 | 17.164 | 17.154 | 17.181 | VV | 1187 | 15224 | 0.15% | 0.008% |
| 325 | 17.185 | 17.181 | 17.191 | VV | 902 | 5378 | 0.05% | 0.003% |
| 326 | 17.198 | 17.191 | 17.207 | VV | 956 | 8053 | 0.08% | 0.004% |
| 327 | 17.234 | 17.207 | 17.241 | VV | 1132 | 20298 | 0.20% | 0.010% |
| 328 | 17.256 | 17.241 | 17.288 | VV | 1546 | 35348 | 0.35% | 0.017% |
| 329 | 17.293 | 17.288 | 17.312 | VV | 1234 | 15198 | 0.15% | 0.008% |
| 330 | 17.370 | 17.312 | 17.407 | VV | 56292 | 802346 | 7.86% | 0.397% |
| 331 | 17.414 | 17.407 | 17.424 | VV | 1160 | 9965 | 0.10% | 0.005% |
| 332 | 17.457 | 17.424 | 17.486 | VV | 3058 | 64042 | 0.63% | 0.032% |
| 333 | 17.497 | 17.486 | 17.513 | VV | 1082 | 16320 | 0.16% | 0.008% |
| 334 | 17.519 | 17.513 | 17.545 | VV | 1046 | 17432 | 0.17% | 0.009% |
| 335 | 17.572 | 17.545 | 17.590 | VV | 1071 | 24613 | 0.24% | 0.012% |
| 336 | 17.618 | 17.590 | 17.638 | VV | 1038 | 26047 | 0.26% | 0.013% |
| 337 | 17.663 | 17.638 | 17.677 | VV | 1240 | 25906 | 0.25% | 0.013% |
| 338 | 17.734 | 17.677 | 17.746 | VV | 646147 | 8963404 | 87.79% | 4.430% |
| 339 | 17.767 | 17.746 | 17.943 | VV | 585316 | 9337294 | 91.45% | 4.615% |
| 340 | 17.984 | 17.943 | 18.154 | VV | 596885 | 9344801 | 91.52% | 4.619% |
| 341 | 18.195 | 18.154 | 18.229 | VV | 55883 | 887184 | 8.69% | 0.438% |
| 342 | 18.236 | 18.229 | 18.262 | VV | 3659 | 66226 | 0.65% | 0.033% |
| 343 | 18.297 | 18.262 | 18.300 | VBA | 4578 | 84196 | 0.82% | 0.042% |

Sum of corrected areas: 202333013

Aromatic EPH 021125.M Sat Mar 01 04:02:09 2025

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Weston Solutions, Inc. | Date Collected: | 02/24/25 |
| Project: | RFP 905 | Date Received: | 02/24/25 |
| Client Sample ID: | P001-CLAY-CF01-01MSD | SDG No.: | Q1421 |
| Lab Sample ID: | Q1421-06 | Matrix: | Water |
| Analytical Method: | NJEPH | % Solid: | 0 |
| Sample Wt/Vol: | 1000 Units: mL | Final Vol: | 2000 uL |
| Soil Aliquot Vol: | uL | Test: | EPH |
| Prep Method : | SW3510 | | |

| File ID : | Dilution: | Prep Date : | Date Analyzed : | Prep Batch ID |
|---|---|---|---|---|
| FC068313.D | 1 | 02/26/25 | 02/27/25 | PB166883 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| Aliphatic C9-C12 | Aliphatic C9-C12 | 203 | | 5.76 | 30.0 | ug/l |
| Aliphatic C12-C16 | Aliphatic C12-C16 | 160 | | 3.61 | 20.0 | ug/l |
| Aliphatic C16-C21 | Aliphatic C16-C21 | 241 | | 5.14 | 30.0 | ug/l |
| Aliphatic C21-C28 | Aliphatic C21-C28 | 321 | | 8.97 | 40.0 | ug/l |
| Aliphatic C28-C40 | Aliphatic C28-C40 | 538 | | 17.0 | 60.0 | ug/l |
| **SURROGATES** | | | | | | |
| 3383-33-2 | 1-chlorooctadecane (SURR) | 35.6 | | 40 - 140 | 71% | SPK: 50 |
| 84-15-1 | ortho-Terphenyl (SURR) | 0.00 | | 40 - 140 | 0% | SPK: 50 |

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

# Quantitation Report For Aliphatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | Q1421-06 | Acq On: | 27 Feb 2025 14:40 |
| Client Sample ID: | P001-CLAY-CF01-01MSD | Operator: | YP/AJ |
| Data file: | FC068313.D | Misc: | |
| Instrument: | FID_C | ALS Vial: | 16 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aliphatic C9-C12 | 3.104 | 6.370 | 14340746 | 101.682 | 300 | ug/ml |
| Aliphatic C12-C16 | 6.371 | 9.754 | 10947218 | 80.109 | 200 | ug/ml |
| Aliphatic C16-C21 | 9.755 | 13.108 | 15865145 | 120.528 | 300 | ug/ml |
| Aliphatic C21-C28 | 13.109 | 16.762 | 19693441 | 160.512 | 400 | ug/ml |
| Aliphatic C28-C40 | 16.763 | 21.566 | 27692602 | 269.262 | 600 | ug/ml |
| Aliphatic EPH | 3.104 | 21.566 | 88539152 | 732.092 | | ug/ml |
| ortho-Terphenyl (SURR) | 0.000 | 0.000 | 0 | 0 | | ug/ml |
| 1-chlorooctadecane (SURR) | 12.841 | 12.841 | 4007052 | 35.63 | | ug/ml |
| Aliphatic C9-C28 | 3.104 | 16.762 | 60846550 | 462.831 | 1200 | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022725AL\
Data File : FC068313.D
Signal(s) : FID1A.ch
Acq On : 27 Feb 2025 14:40
Operator : YP/AJ
Sample : Q1421-06
Misc :
ALS Vial : 16 Sample Multiplier: 1

**Instrument :**
FID_C
**ClientSampleId :**
P001-CLAY-CF01-01MSD

**Manual Integrations APPROVED**
Reviewed By :Yogesh Patel 03/05/2025
Supervised By :Ankita Jodhani 03/05/2025

Integration File: autoint1.e
Quant Time: Mar 05 04:44:42 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

| | Compound | R.T. | Response | Conc Units |
|---|---|---|---|---|
| | **System Monitoring Compounds** | | | |
| 12) S | 1-chlorooctadecane (S... | 12.841 | 4007052 | 35.626 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 71.25% |
| | **Target Compounds** | | | |
| 1) T | n-Nonane (C9) | 3.206 | 4075170 | 28.968 ug/ml |
| 2) T | n-Decane (C10) | 4.263 | 4634108 | 32.710 ug/ml |
| 4) T | n-Dodecane (C12) | 6.271 | 4945718 | 35.136 ug/ml |
| 6) T | n-Tetradecane (C14) | 8.060 | 5044150 | 36.996 ug/ml |
| 7) T | n-Hexadecane (C16) | 9.656 | 5038611 | 36.787 ug/ml |
| 8) T | n-Octadecane (C18) | 11.095 | 5125788 | 37.481 ug/ml |
| 10) T | n-Eicosane (C20) | 12.401 | 5216568 | 40.039 ug/ml |
| 11) T | n-Heneicosane (C21) | 13.011 | 4984588 | 38.989 ug/ml |
| 13) T | n-Docosane (C22) | 13.597 | 4970885 | 39.443 ug/ml |
| 14) T | n-Tetracosane (C24) | 14.698 | 4884334 | 39.270 ug/ml |
| 15) T | n-Hexacosane (C26) | 15.716 | 4778837 | 39.302 ug/ml |
| 16) T | n-Octacosane (C28) | 16.665 | 4638223 | 39.053 ug/ml |
| 17) T | n-Tricontane (C30) | 17.551 | 4684203 | 38.916 ug/mlm |
| 18) T | n-Dotriacontane (C32) | 18.384 | 4515767 | 38.907 ug/mlm |
| 19) T | n-Tetratriacontane (C34) | 19.166 | 4229541 | 39.141 ug/ml |
| 20) T | n-Hexatriacontane (C36) | 19.904 | 3881880 | 40.365 ug/ml |
| 21) T | n-Octatriacontane (C38) | 20.617 | 3693801 | 41.089 ug/ml |
| 22) T | n-Tetracontane (C40) | 21.472 | 3548032 | 41.008 ug/ml |

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

Quantitation Report (QT Reviewed)

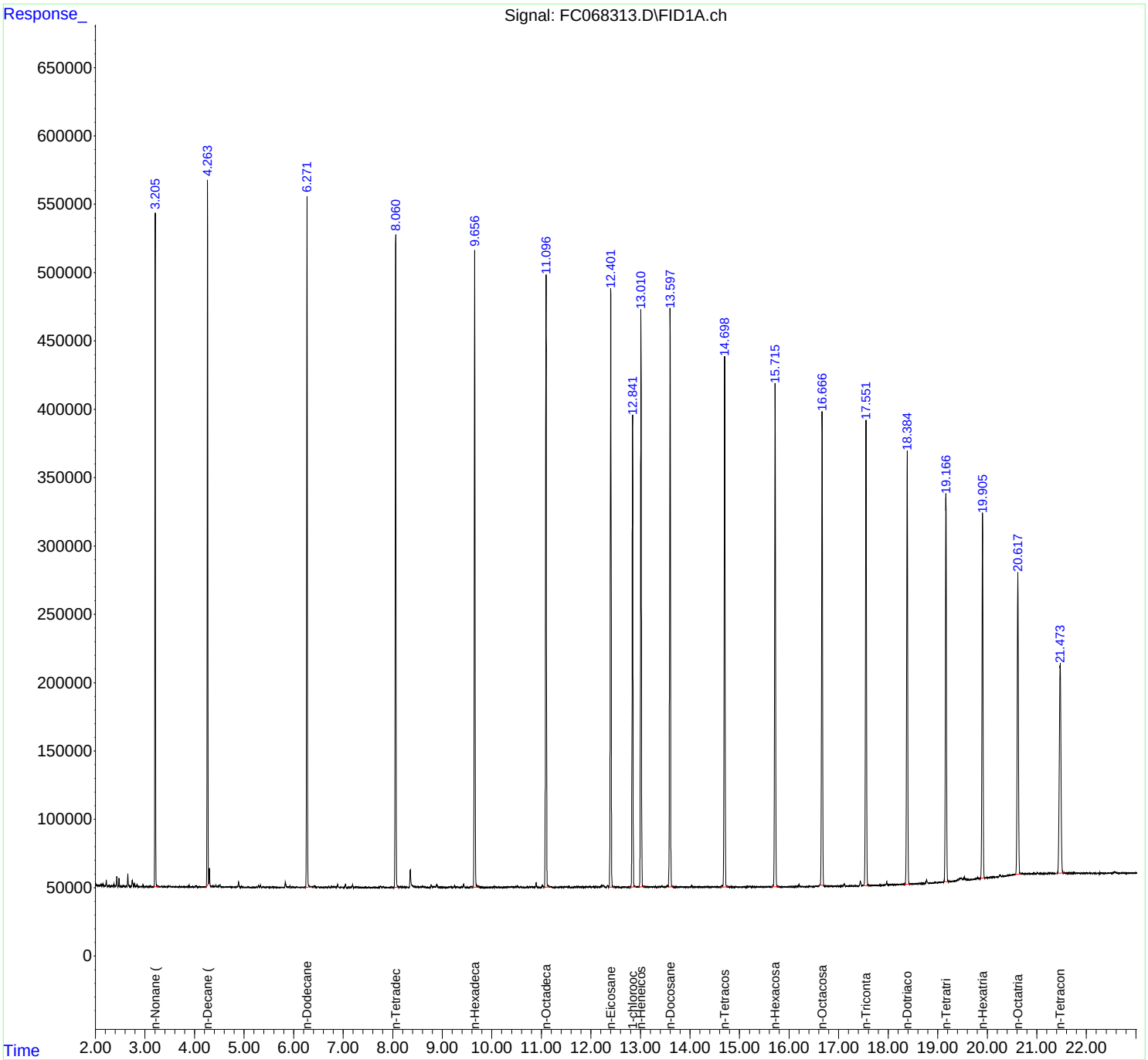
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC022725AL\
Data File : FC068313.D
Signal(s) : FID1A.ch
Acq On : 27 Feb 2025 14:40
Operator : YP/AJ
Sample : Q1421-06
Misc :
ALS Vial : 16 Sample Multiplier: 1

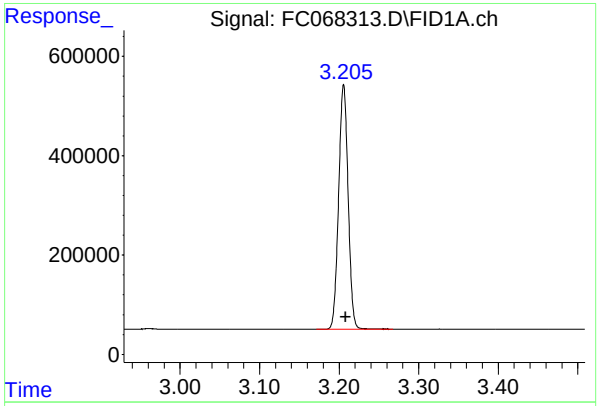
**Instrument :**
FID_C
**ClientSampleId :**
P001-CLAY-CF01-01MSD

**Manual Integrations APPROVED**
Reviewed By :Yogesh Patel 03/05/2025
Supervised By :Ankita Jodhani 03/05/2025

Integration File: autoint1.e
Quant Time: Mar 05 04:44:42 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Mar 05 03:08:52 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um





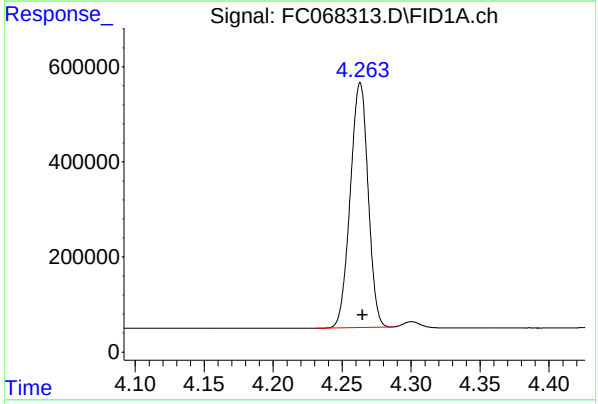

#1 n-Nonane (C9)

R.T.: 3.206 min
Delta R.T.: -0.002 min
Response: 4075170
Conc: 28.97 ug/ml

**Instrument :**
FID_C
**ClientSampleId :**
P001-CLAY-CF01-01MSD

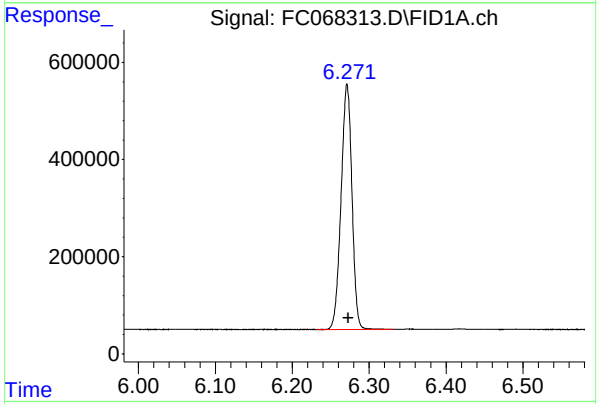
**Manual Integrations APPROVED**

Reviewed By :Yogesh Patel 03/05/2025
Supervised By :Ankita Jodhani 03/05/2025



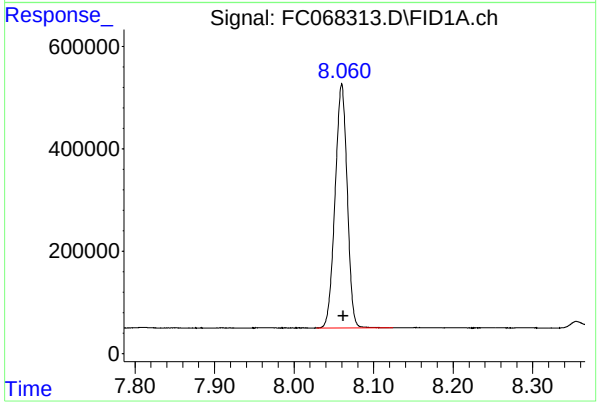

#2 n-Decane (C10)

R.T.: 4.263 min
Delta R.T.: -0.002 min
Response: 4634108
Conc: 32.71 ug/ml



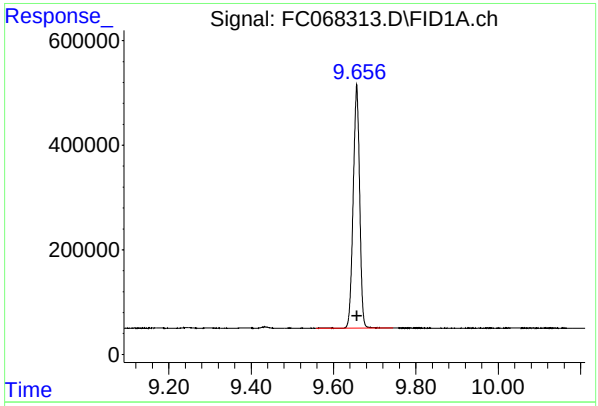

#4 n-Dodecane (C12)

R.T.: 6.271 min
Delta R.T.: -0.002 min
Response: 4945718
Conc: 35.14 ug/ml




#6 n-Tetradecane (C14)

R.T.: 8.060 min
Delta R.T.: -0.002 min
Response: 5044150
Conc: 37.00 ug/ml



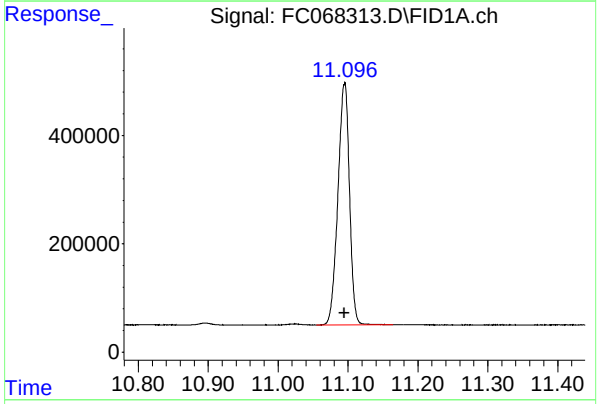

#7 n-Hexadecane (C16)

R.T.: 9.656 min
Delta R.T.: -0.001 min
Response: 5038611
Conc: 36.79 ug/ml

**Instrument :**
FID_C
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P001-CLAY-CF01-01MSD

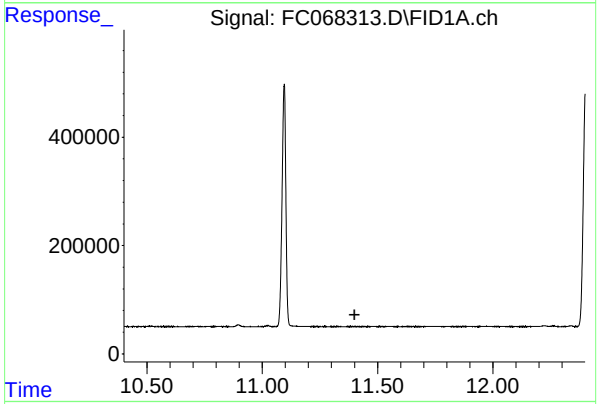
**Manual Integrations APPROVED**

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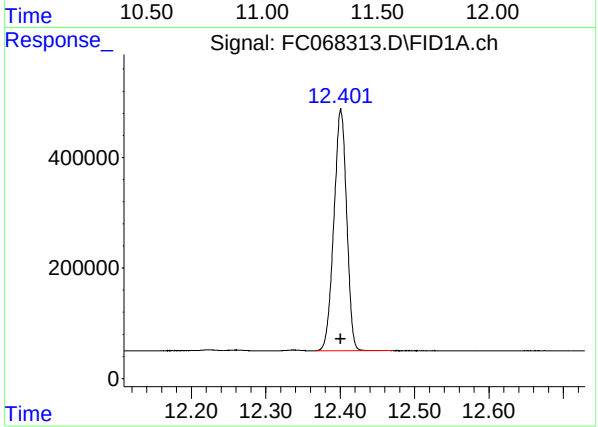

#8 n-Octadecane (C18)

R.T.: 11.095 min
Delta R.T.: 0.000 min
Response: 5125788
Conc: 37.48 ug/ml



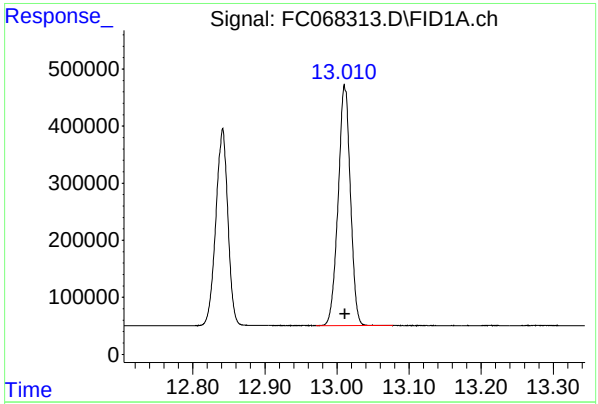

#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.400 min
Response: 0
Conc: N.D.




#10 n-Eicosane (C20)

R.T.: 12.401 min
Delta R.T.: 0.000 min
Response: 5216568
Conc: 40.04 ug/ml



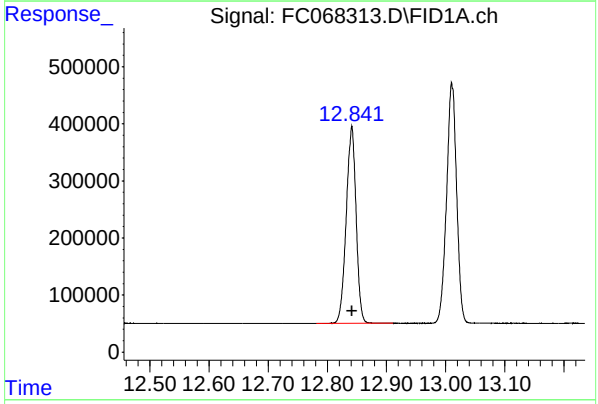

#11 n-Heneicosane (C21)

R.T.: 13.011 min
Delta R.T.: 0.000 min
Response: 4984588
Conc: 38.99 ug/ml

**Instrument :**
FID_C
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P001-CLAY-CF01-01MSD

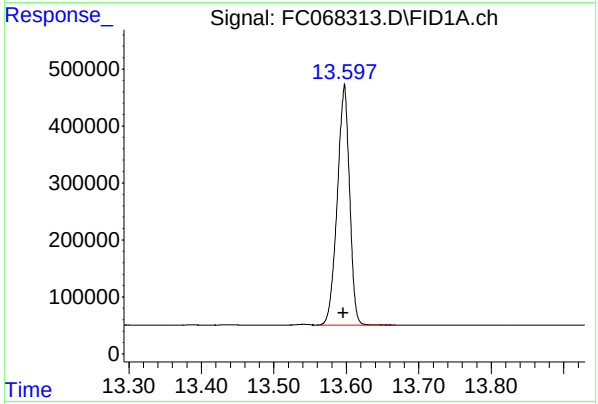
**Manual Integrations APPROVED**

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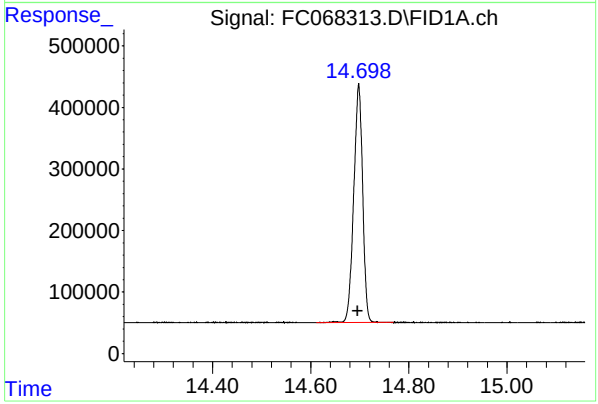

#12 1-chlorooctadecane (SURR)

R.T.: 12.841 min
Delta R.T.: 0.000 min
Response: 4007052
Conc: 35.63 ug/ml



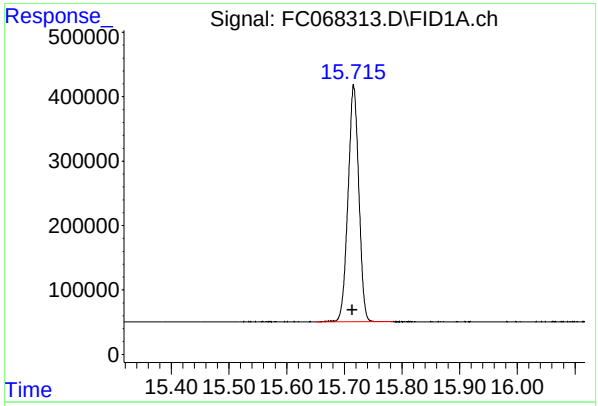

#13 n-Docosane (C22)

R.T.: 13.597 min
Delta R.T.: 0.001 min
Response: 4970885
Conc: 39.44 ug/ml




#14 n-Tetracosane (C24)

R.T.: 14.698 min
Delta R.T.: 0.002 min
Response: 4884334
Conc: 39.27 ug/ml



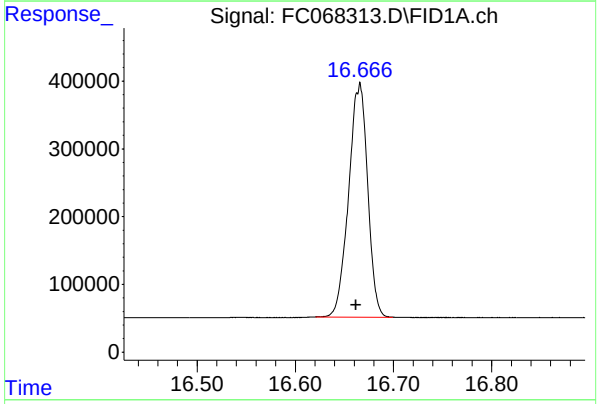

#15 n-Hexacosane (C26)

R.T.: 15.716 min
Delta R.T.: 0.002 min
Response: 4778837
Conc: 39.30 ug/ml

**Instrument :**
FID_C
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P001-CLAY-CF01-01MSD

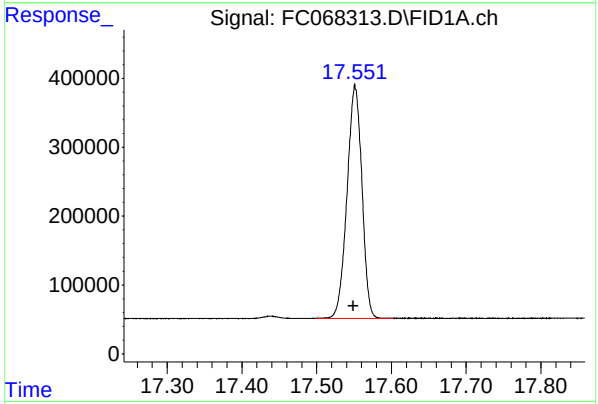
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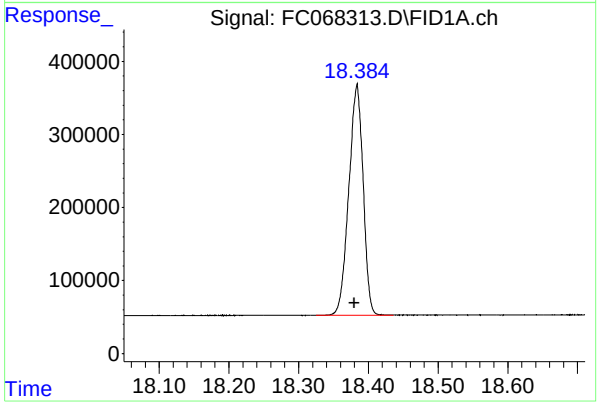

#16 n-Octacosane (C28)

R.T.: 16.665 min
Delta R.T.: 0.003 min
Response: 4638223
Conc: 39.05 ug/ml



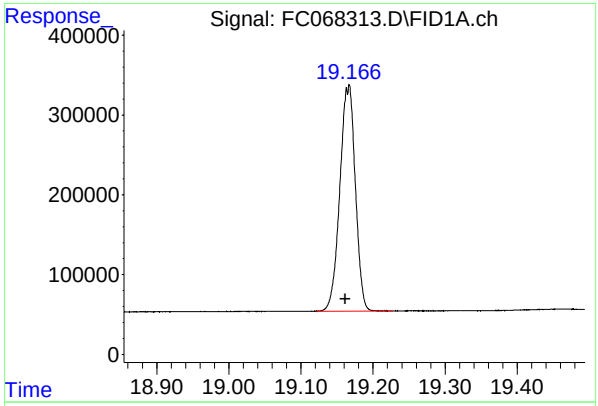

#17 n-Tricontane (C30)

R.T.: 17.551 min
Delta R.T.: 0.002 min
Response: 4684203
Conc: 38.92 ug/ml m




#18 n-Dotriacontane (C32)

R.T.: 18.384 min
Delta R.T.: 0.004 min
Response: 4515767
Conc: 38.91 ug/ml m



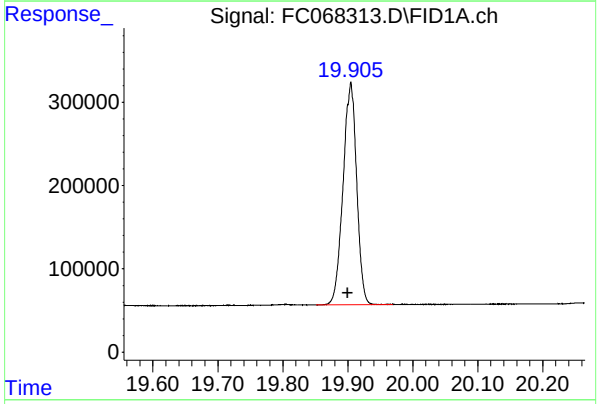

#19 n-Tetratriacontane (C34)

R.T.: 19.166 min
Delta R.T.: 0.005 min
Response: 4229541
Conc: 39.14 ug/ml

**Instrument :**
FID_C
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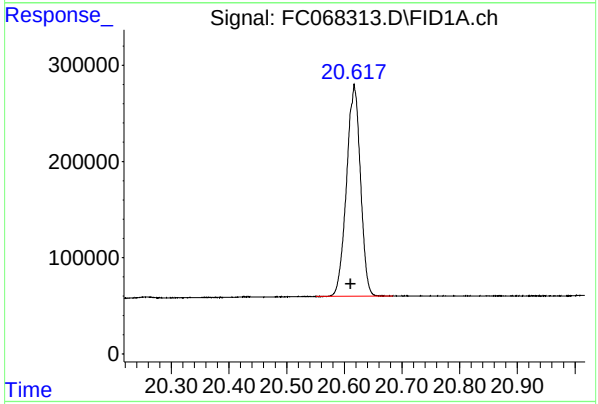
**Manual Integrations**
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Reviewed By :Yogesh Patel 03/05/2025
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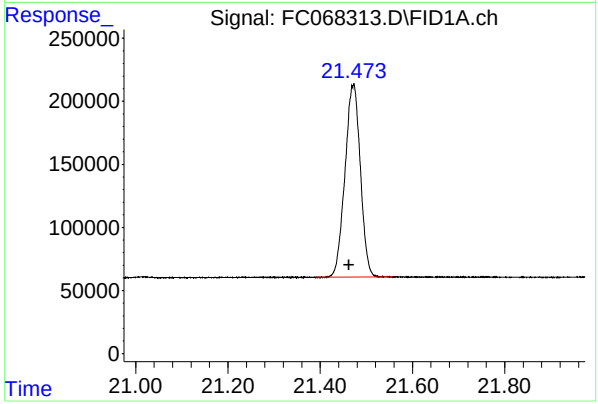

#20 n-Hexatriacontane (C36)

R.T.: 19.904 min
Delta R.T.: 0.004 min
Response: 3881880
Conc: 40.37 ug/ml




#21 n-Octatriacontane (C38)

R.T.: 20.617 min
Delta R.T.: 0.006 min
Response: 3693801
Conc: 41.09 ug/ml




#22 n-Tetracontane (C40)

R.T.: 21.472 min
Delta R.T.: 0.009 min
Response: 3548032
Conc: 41.01 ug/ml

rteres

**Instrument :** FID_C
**ClientSampleId :** P001-CLAY-CF01-01MSD

Area Percent Report

**Manual IntegrationsAPPROVED**

Reviewed By :Yogesh Patel 03/05/2025
Supervised By :Ankita Jodhani 03/05/2025

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC02272
Data File : FC068313.D
Signal(s) : FID1A.ch
Acq On : 27 Feb 2025 14:40
Sample : Q1421-06
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 021125.M
Title : GC Extractables

Signal : FID1A.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 2.374 | 2.304 | 2.400 | BV | 1797 | 16289 | 0.31% | 0.017% |
| 2 | 2.431 | 2.400 | 2.455 | PV | 7316 | 61794 | 1.18% | 0.066% |
| 3 | 2.476 | 2.455 | 2.521 | VV | 6082 | 51862 | 0.99% | 0.056% |
| 4 | 2.527 | 2.521 | 2.540 | VV | 168 | 1556 | 0.03% | 0.002% |
| 5 | 2.558 | 2.540 | 2.572 | VV | 373 | 4049 | 0.08% | 0.004% |
| 6 | 2.592 | 2.572 | 2.633 | VV | 281 | 4792 | 0.09% | 0.005% |
| 7 | 2.654 | 2.633 | 2.720 | VV | 9368 | 81240 | 1.55% | 0.087% |
| 8 | 2.742 | 2.720 | 2.771 | VV | 4692 | 61221 | 1.17% | 0.066% |
| 9 | 2.788 | 2.771 | 2.813 | VV | 2455 | 23497 | 0.45% | 0.025% |
| 10 | 2.839 | 2.813 | 2.898 | VV | 1765 | 19983 | 0.38% | 0.021% |
| 11 | 2.915 | 2.898 | 2.941 | VV | 310 | 3550 | 0.07% | 0.004% |
| 12 | 2.961 | 2.941 | 3.006 | VV | 1469 | 14025 | 0.27% | 0.015% |
| 13 | 3.030 | 3.006 | 3.080 | VV | 208 | 5200 | 0.10% | 0.006% |
| 14 | 3.100 | 3.080 | 3.142 | VV | 271 | 3645 | 0.07% | 0.004% |
| 15 | 3.206 | 3.142 | 3.308 | PV | 487352 | 4092666 | 78.06% | 4.395% |
| 16 | 3.328 | 3.308 | 3.366 | VV | 384 | 7846 | 0.15% | 0.008% |
| 17 | 3.381 | 3.366 | 3.394 | VV | 208 | 2879 | 0.05% | 0.003% |
| 18 | 3.405 | 3.394 | 3.428 | VV | 292 | 3760 | 0.07% | 0.004% |
| 19 | 3.442 | 3.428 | 3.451 | VV | 203 | 1785 | 0.03% | 0.002% |
| 20 | 3.479 | 3.451 | 3.494 | VV | 370 | 6205 | 0.12% | 0.007% |
| 21 | 3.512 | 3.494 | 3.546 | VV | 410 | 7154 | 0.14% | 0.008% |
| 22 | 3.574 | 3.546 | 3.598 | VV | 235 | 3585 | 0.07% | 0.004% |
| 23 | 3.615 | 3.598 | 3.668 | VV | 198 | 3800 | 0.07% | 0.004% |
| 24 | 3.693 | 3.668 | 3.727 | PV | 407 | 5735 | 0.11% | 0.006% |
| 25 | 3.737 | 3.727 | 3.759 | VV | 143 | 1732 | 0.03% | 0.002% |
| 26 | 3.777 | 3.759 | 3.795 | VV | 316 | 3721 | 0.07% | 0.004% |
| 27 | 3.866 | 3.795 | 3.878 | VV | 639 | 8737 | 0.17% | 0.009% |
| 28 | 3.894 | 3.878 | 3.914 | VV | 1015 | 10521 | 0.20% | 0.011% |
| 29 | 3.921 | 3.914 | 3.937 | VV | 132 | 1248 | 0.02% | 0.001% |
| 30 | 3.958 | 3.937 | 3.985 | VV | 205 | 2662 | 0.05% | 0.003% |
| 31 | 4.028 | 3.985 | 4.148 | PV | 935 | 21611 | 0.41% | 0.023% |
| 32 | 4.151 | 4.148 | 4.158 | VV | 81 | 304 | 0.01% | 0.000% |
| 33 | 4.217 | 4.158 | 4.234 | VV | 144 | 3695 | 0.07% | 0.004% |
| 34 | 4.263 | 4.234 | 4.287 | VV | 520395 | 4680813 | 89.28% | 5.027% |
| 35 | 4.301 | 4.287 | 4.347 | VV | 13746 | 143044 | 2.73% | 0.154% |
| 36 | 4.373 | 4.347 | 4.394 | VV | 657 | 14836 | 0.28% | 0.016% |

**Instrument :**
FID_C
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rteres

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 37 | 4.429 | 4.394 | 4.449 | VV | 1396 | 21771 | 0.42% | 0.023% |
| 38 | 4.458 | 4.449 | 4.467 | VV | 397 | 3572 | | |
| 39 | 4.484 | 4.467 | 4.498 | VV | 1038 | 11416 | | |
| 40 | 4.514 | 4.498 | 4.571 | VV | 1941 | 24517 | | |
| 41 | 4.587 | 4.571 | 4.608 | VV | 285 | 3564 | | |
| 42 | 4.634 | 4.608 | 4.658 | VV | 319 | 6178 | | |
| 43 | 4.669 | 4.658 | 4.691 | VV | 130 | 2359 | 0.05% | 0.003% |
| 44 | 4.711 | 4.691 | 4.764 | VV | 208 | 5141 | 0.10% | 0.006% |
| 45 | 4.782 | 4.764 | 4.792 | PV | 110 | 1109 | 0.02% | 0.001% |
| 46 | 4.811 | 4.792 | 4.846 | VV | 240 | 3450 | 0.07% | 0.004% |
| 47 | 4.890 | 4.846 | 4.924 | VV | 4053 | 50341 | 0.96% | 0.054% |
| 48 | 4.947 | 4.924 | 4.963 | VV | 772 | 8619 | 0.16% | 0.009% |
| 49 | 4.972 | 4.963 | 5.011 | VV | 282 | 4469 | 0.09% | 0.005% |
| 50 | 5.020 | 5.011 | 5.048 | VV | 121 | 798 | 0.02% | 0.001% |
| 51 | 5.081 | 5.048 | 5.149 | VV | 248 | 6858 | 0.13% | 0.007% |
| 52 | 5.160 | 5.149 | 5.219 | VV | 153 | 4152 | 0.08% | 0.004% |
| 53 | 5.256 | 5.219 | 5.271 | VV | 169 | 2798 | 0.05% | 0.003% |
| 54 | 5.292 | 5.271 | 5.314 | PV | 1769 | 19495 | 0.37% | 0.021% |
| 55 | 5.332 | 5.314 | 5.358 | VV | 1333 | 15716 | 0.30% | 0.017% |
| 56 | 5.387 | 5.358 | 5.417 | VV | 280 | 5000 | 0.10% | 0.005% |
| 57 | 5.472 | 5.417 | 5.511 | VV | 285 | 8101 | 0.15% | 0.009% |
| 58 | 5.533 | 5.511 | 5.553 | VV | 136 | 2142 | 0.04% | 0.002% |
| 59 | 5.584 | 5.553 | 5.598 | VV | 283 | 4886 | 0.09% | 0.005% |
| 60 | 5.624 | 5.598 | 5.698 | PV | 193 | 5074 | 0.10% | 0.005% |
| 61 | 5.707 | 5.698 | 5.726 | VV | 77 | 662 | 0.01% | 0.001% |
| 62 | 5.739 | 5.726 | 5.782 | PV | 153 | 2940 | 0.06% | 0.003% |
| 63 | 5.792 | 5.782 | 5.803 | VV | 175 | 1515 | 0.03% | 0.002% |
| 64 | 5.834 | 5.803 | 5.873 | VV | 3909 | 52540 | 1.00% | 0.056% |
| 65 | 5.887 | 5.873 | 5.907 | VV | 553 | 8097 | 0.15% | 0.009% |
| 66 | 5.929 | 5.907 | 5.958 | VV | 1011 | 13415 | 0.26% | 0.014% |
| 67 | 5.991 | 5.958 | 6.031 | VV | 519 | 10452 | 0.20% | 0.011% |
| 68 | 6.061 | 6.031 | 6.095 | VV | 417 | 9704 | 0.19% | 0.010% |
| 69 | 6.104 | 6.095 | 6.113 | VV | 208 | 1864 | 0.04% | 0.002% |
| 70 | 6.118 | 6.113 | 6.135 | VV | 162 | 1679 | 0.03% | 0.002% |
| 71 | 6.162 | 6.135 | 6.187 | VV | 177 | 3606 | 0.07% | 0.004% |
| 72 | 6.199 | 6.187 | 6.231 | VV | 164 | 2956 | 0.06% | 0.003% |
| 73 | 6.271 | 6.231 | 6.337 | VV | 503906 | 4966516 | 94.73% | 5.334% |
| 74 | 6.352 | 6.337 | 6.374 | VV | 945 | 14935 | 0.28% | 0.016% |
| 75 | 6.385 | 6.374 | 6.401 | VV | 609 | 7720 | 0.15% | 0.008% |
| 76 | 6.417 | 6.401 | 6.441 | VV | 1419 | 18447 | 0.35% | 0.020% |
| 77 | 6.450 | 6.441 | 6.474 | VV | 552 | 7015 | 0.13% | 0.008% |
| 78 | 6.491 | 6.474 | 6.568 | VV | 735 | 14955 | 0.29% | 0.016% |
| 79 | 6.587 | 6.568 | 6.611 | VV | 258 | 4612 | 0.09% | 0.005% |
| 80 | 6.631 | 6.611 | 6.690 | VV | 218 | 7443 | 0.14% | 0.008% |
| 81 | 6.709 | 6.690 | 6.733 | VV | 633 | 7863 | 0.15% | 0.008% |
| 82 | 6.762 | 6.733 | 6.781 | VV | 714 | 10631 | 0.20% | 0.011% |
| 83 | 6.789 | 6.781 | 6.797 | VV | 399 | 3794 | 0.07% | 0.004% |
| 84 | 6.812 | 6.797 | 6.856 | VV | 689 | 13970 | 0.27% | 0.015% |
| 85 | 6.888 | 6.856 | 6.947 | VV | 1982 | 32188 | 0.61% | 0.035% |
| 86 | 6.994 | 6.947 | 7.018 | VV | 276 | 7437 | 0.14% | 0.008% |
| 87 | 7.049 | 7.018 | 7.082 | VV | 2571 | 29566 | 0.56% | 0.032% |
| 88 | 7.126 | 7.082 | 7.141 | VV | 335 | 7293 | 0.14% | 0.008% |
| 89 | 7.157 | 7.141 | 7.168 | VV | 426 | 4774 | 0.09% | 0.005% |

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| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 90 | 7.190 | 7.168 | 7.218 | VV | 2100 | 25808 | 0.49% | 0.028% |
| 91 | 7.227 | 7.218 | 7.236 | VV | 264 | 2152 | | |
| 92 | 7.252 | 7.236 | 7.268 | VV | 443 | 5449 | | |
| 93 | 7.281 | 7.268 | 7.311 | VV | 526 | 6705 | | |
| 94 | 7.338 | 7.311 | 7.384 | VV | 167 | 4447 | | |
| 95 | 7.407 | 7.384 | 7.426 | VV | 131 | 1878 | | |
| 96 | 7.450 | 7.426 | 7.486 | VV | 851 | 10695 | 0.20% | 0.011% |
| 97 | 7.529 | 7.486 | 7.576 | PV | 195 | 7144 | 0.14% | 0.008% |
| 98 | 7.608 | 7.576 | 7.634 | VV | 252 | 5837 | 0.11% | 0.006% |
| 99 | 7.643 | 7.634 | 7.688 | VV | 205 | 3920 | 0.07% | 0.004% |
| 100 | 7.711 | 7.688 | 7.732 | PV | 326 | 3704 | 0.07% | 0.004% |
| 101 | 7.754 | 7.732 | 7.784 | VV | 1091 | 13501 | 0.26% | 0.014% |
| 102 | 7.810 | 7.784 | 7.833 | VV | 968 | 12788 | 0.24% | 0.014% |
| 103 | 7.848 | 7.833 | 7.865 | VV | 203 | 2356 | 0.04% | 0.003% |
| 104 | 7.875 | 7.865 | 7.898 | VV | 107 | 1190 | 0.02% | 0.001% |
| 105 | 7.910 | 7.898 | 7.940 | VV | 186 | 2210 | 0.04% | 0.002% |
| 106 | 7.965 | 7.940 | 7.998 | VV | 678 | 8733 | 0.17% | 0.009% |
| 107 | 8.008 | 7.998 | 8.023 | VV | 194 | 1841 | 0.04% | 0.002% |
| 108 | 8.060 | 8.023 | 8.133 | VV | 475637 | 5061560 | 96.54% | 5.436% |
| 109 | 8.153 | 8.133 | 8.189 | VV | 755 | 17708 | 0.34% | 0.019% |
| 110 | 8.206 | 8.189 | 8.226 | VV | 433 | 7101 | 0.14% | 0.008% |
| 111 | 8.249 | 8.226 | 8.274 | VV | 456 | 8399 | 0.16% | 0.009% |
| 112 | 8.290 | 8.274 | 8.318 | VV | 586 | 6417 | 0.12% | 0.007% |
| 113 | 8.355 | 8.318 | 8.432 | PV | 12908 | 197011 | 3.76% | 0.212% |
| 114 | 8.450 | 8.432 | 8.495 | VV | 734 | 19950 | 0.38% | 0.021% |
| 115 | 8.517 | 8.495 | 8.534 | VV | 601 | 10636 | 0.20% | 0.011% |
| 116 | 8.544 | 8.534 | 8.574 | VV | 500 | 9179 | 0.18% | 0.010% |
| 117 | 8.597 | 8.574 | 8.634 | VV | 764 | 16925 | 0.32% | 0.018% |
| 118 | 8.657 | 8.634 | 8.683 | VV | 320 | 4715 | 0.09% | 0.005% |
| 119 | 8.707 | 8.683 | 8.738 | VV | 342 | 4537 | 0.09% | 0.005% |
| 120 | 8.777 | 8.738 | 8.798 | VV | 1990 | 26813 | 0.51% | 0.029% |
| 121 | 8.814 | 8.798 | 8.860 | VV | 745 | 20367 | 0.39% | 0.022% |
| 122 | 8.891 | 8.860 | 8.943 | VV | 2018 | 38049 | 0.73% | 0.041% |
| 123 | 8.964 | 8.943 | 8.985 | VV | 444 | 6517 | 0.12% | 0.007% |
| 124 | 9.014 | 8.985 | 9.044 | VV | 341 | 5333 | 0.10% | 0.006% |
| 125 | 9.067 | 9.044 | 9.081 | PV | 175 | 2600 | 0.05% | 0.003% |
| 126 | 9.118 | 9.081 | 9.128 | VV | 328 | 5640 | 0.11% | 0.006% |
| 127 | 9.135 | 9.128 | 9.146 | VV | 301 | 2579 | 0.05% | 0.003% |
| 128 | 9.176 | 9.146 | 9.218 | VV | 595 | 12132 | 0.23% | 0.013% |
| 129 | 9.247 | 9.218 | 9.275 | VV | 1133 | 19362 | 0.37% | 0.021% |
| 130 | 9.296 | 9.275 | 9.328 | VV | 772 | 11156 | 0.21% | 0.012% |
| 131 | 9.338 | 9.328 | 9.361 | VV | 192 | 3094 | 0.06% | 0.003% |
| 132 | 9.390 | 9.361 | 9.414 | VV | 681 | 11120 | 0.21% | 0.012% |
| 133 | 9.434 | 9.414 | 9.476 | VV | 2613 | 30130 | 0.57% | 0.032% |
| 134 | 9.493 | 9.476 | 9.514 | VV | 234 | 2663 | 0.05% | 0.003% |
| 135 | 9.523 | 9.514 | 9.537 | VV | 176 | 1399 | 0.03% | 0.002% |
| 136 | 9.575 | 9.537 | 9.613 | VV | 653 | 13273 | 0.25% | 0.014% |
| 137 | 9.656 | 9.613 | 9.850 | VV | 459523 | 5072787 | 96.76% | 5.448% |
| 138 | 9.872 | 9.850 | 9.884 | VV | 134 | 1800 | 0.03% | 0.002% |
| 139 | 9.894 | 9.884 | 9.913 | VV | 162 | 1581 | 0.03% | 0.002% |
| 140 | 9.932 | 9.913 | 9.946 | VV | 194 | 2777 | 0.05% | 0.003% |
| 141 | 9.972 | 9.946 | 10.003 | VV | 322 | 6082 | 0.12% | 0.007% |

**Instrument :**
FID_C
**ClientSampleId :**
P001-CLAY-CF01-01MSD

**Manual IntegrationsAPPROVED**

Reviewed By :Yogesh Patel 03/05/2025
Supervised By :Ankita Jodhani 03/05/2025

rteres

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 142 | 10.047 | 10.003 | 10.064 | VV | 473 | 9713 | 0.19% | 0.010% |
| 143 | 10.081 | 10.064 | 10.103 | VV | 337 | 5677 | | |
| 144 | 10.129 | 10.103 | 10.152 | VV | 239 | 5813 | | |
| 145 | 10.161 | 10.152 | 10.188 | VV | 198 | 2232 | | |
| 146 | 10.251 | 10.188 | 10.265 | PV | 354 | 6607 | | |
| 147 | 10.283 | 10.265 | 10.304 | VV | 298 | 5482 | | |
| 148 | 10.329 | 10.304 | 10.367 | VV | 480 | 11653 | 0.22% | 0.013% |
| 149 | 10.395 | 10.367 | 10.431 | VV | 565 | 13708 | 0.26% | 0.015% |
| 150 | 10.450 | 10.431 | 10.460 | VV | 397 | 4984 | 0.10% | 0.005% |
| 151 | 10.478 | 10.460 | 10.490 | VV | 366 | 5800 | 0.11% | 0.006% |
| 152 | 10.515 | 10.490 | 10.554 | VV | 1017 | 18195 | 0.35% | 0.020% |
| 153 | 10.605 | 10.554 | 10.626 | VV | 310 | 8082 | 0.15% | 0.009% |
| 154 | 10.637 | 10.626 | 10.660 | VV | 108 | 1895 | 0.04% | 0.002% |
| 155 | 10.717 | 10.660 | 10.744 | VV | 474 | 10524 | 0.20% | 0.011% |
| 156 | 10.763 | 10.744 | 10.790 | VV | 667 | 9886 | 0.19% | 0.011% |
| 157 | 10.813 | 10.790 | 10.832 | VV | 511 | 8199 | 0.16% | 0.009% |
| 158 | 10.844 | 10.832 | 10.868 | VV | 222 | 3165 | 0.06% | 0.003% |
| 159 | 10.896 | 10.868 | 10.936 | VV | 3578 | 42174 | 0.80% | 0.045% |
| 160 | 10.951 | 10.936 | 10.970 | PV | 121 | 988 | 0.02% | 0.001% |
| 161 | 11.024 | 10.970 | 11.058 | VV | 2010 | 27012 | 0.52% | 0.029% |
| 162 | 11.095 | 11.058 | 11.168 | VV | 447108 | 5144925 | 98.13% | 5.525% |
| 163 | 11.185 | 11.168 | 11.231 | VV | 703 | 15192 | 0.29% | 0.016% |
| 164 | 11.242 | 11.231 | 11.258 | VV | 188 | 2251 | 0.04% | 0.002% |
| 165 | 11.271 | 11.258 | 11.286 | VV | 137 | 1713 | 0.03% | 0.002% |
| 166 | 11.317 | 11.286 | 11.361 | VV | 204 | 5594 | 0.11% | 0.006% |
| 167 | 11.479 | 11.361 | 11.527 | VV | 483 | 21330 | 0.41% | 0.023% |
| 168 | 11.562 | 11.527 | 11.598 | VV | 361 | 10061 | 0.19% | 0.011% |
| 169 | 11.615 | 11.598 | 11.626 | VV | 154 | 1924 | 0.04% | 0.002% |
| 170 | 11.658 | 11.626 | 11.671 | VV | 249 | 3838 | 0.07% | 0.004% |
| 171 | 11.753 | 11.671 | 11.788 | VV | 569 | 24018 | 0.46% | 0.026% |
| 172 | 11.799 | 11.788 | 11.828 | VV | 306 | 6457 | 0.12% | 0.007% |
| 173 | 11.838 | 11.828 | 11.850 | VV | 164 | 2116 | 0.04% | 0.002% |
| 174 | 11.865 | 11.850 | 11.874 | VV | 201 | 2278 | 0.04% | 0.002% |
| 175 | 11.892 | 11.874 | 11.909 | VV | 347 | 5535 | 0.11% | 0.006% |
| 176 | 11.916 | 11.909 | 11.932 | VV | 373 | 3377 | 0.06% | 0.004% |
| 177 | 11.973 | 11.932 | 12.011 | VV | 671 | 17432 | 0.33% | 0.019% |
| 178 | 12.047 | 12.011 | 12.072 | VV | 418 | 9443 | 0.18% | 0.010% |
| 179 | 12.095 | 12.072 | 12.134 | VV | 332 | 6881 | 0.13% | 0.007% |
| 180 | 12.172 | 12.134 | 12.184 | VV | 343 | 6842 | 0.13% | 0.007% |
| 181 | 12.223 | 12.184 | 12.243 | VV | 1848 | 31253 | 0.60% | 0.034% |
| 182 | 12.261 | 12.243 | 12.311 | VV | 1459 | 21462 | 0.41% | 0.023% |
| 183 | 12.338 | 12.311 | 12.364 | VV | 1480 | 19776 | 0.38% | 0.021% |
| 184 | 12.401 | 12.364 | 12.638 | VV | 435383 | 5242770 | 100.00% | 5.630% |
| 185 | 12.655 | 12.638 | 12.664 | VV | 203 | 2677 | 0.05% | 0.003% |
| 186 | 12.673 | 12.664 | 12.737 | VV | 289 | 6130 | 0.12% | 0.007% |
| 187 | 12.841 | 12.737 | 12.941 | PV | 343205 | 4039887 | 77.06% | 4.338% |
| 188 | 12.955 | 12.941 | 12.974 | VV | 436 | 7313 | 0.14% | 0.008% |
| 189 | 13.011 | 12.974 | 13.188 | VV | 419425 | 5028528 | 95.91% | 5.400% |
| 190 | 13.213 | 13.188 | 13.241 | VV | 367 | 8989 | 0.17% | 0.010% |
| 191 | 13.279 | 13.241 | 13.331 | VV | 448 | 15744 | 0.30% | 0.017% |
| 192 | 13.353 | 13.331 | 13.368 | VV | 303 | 5137 | 0.10% | 0.006% |
| 193 | 13.386 | 13.368 | 13.411 | VV | 590 | 10128 | 0.19% | 0.011% |
| 194 | 13.436 | 13.411 | 13.487 | VV | 874 | 18237 | 0.35% | 0.020% |

**Instrument :**
FID_C
**ClientSampleId :**
P001-CLAY-CF01-01MSD

rteres

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 195 | 13.498 | 13.487 | 13.508 | VV | 219 | 2111 | 0.04% | 0.002% |
| 196 | 13.541 | 13.508 | 13.561 | VV | 1632 | 22790 | 0 | |
| 197 | 13.597 | 13.561 | 13.711 | VV | 421828 | 4994012 | 95 | |
| 198 | 13.720 | 13.711 | 13.756 | VV | 204 | 3390 | 0 | |
| 199 | 13.791 | 13.756 | 13.814 | VV | 154 | 4012 | 0 | |
| 200 | 13.819 | 13.814 | 13.825 | VV | 201 | 986 | 0 | |
| 201 | 13.843 | 13.825 | 13.871 | VV | 176 | 3706 | 0.07% | 0.004% |
| 202 | 13.875 | 13.871 | 13.905 | VV | 205 | 2355 | 0.04% | 0.003% |
| 203 | 13.926 | 13.905 | 13.962 | VV | 160 | 3212 | 0.06% | 0.003% |
| 204 | 13.970 | 13.962 | 13.979 | VV | 81 | 659 | 0.01% | 0.001% |
| 205 | 14.031 | 13.979 | 14.068 | VV | 1197 | 20188 | 0.39% | 0.022% |
| 206 | 14.075 | 14.068 | 14.081 | VV | 166 | 1471 | 0.03% | 0.002% |
| 207 | 14.092 | 14.081 | 14.108 | VV | 215 | 2783 | 0.05% | 0.003% |
| 208 | 14.157 | 14.108 | 14.201 | VV | 350 | 10396 | 0.20% | 0.011% |
| 209 | 14.213 | 14.201 | 14.227 | VV | 174 | 2016 | 0.04% | 0.002% |
| 210 | 14.248 | 14.227 | 14.259 | VV | 220 | 2475 | 0.05% | 0.003% |
| 211 | 14.312 | 14.259 | 14.344 | VV | 274 | 8658 | 0.17% | 0.009% |
| 212 | 14.353 | 14.344 | 14.382 | VV | 197 | 3167 | 0.06% | 0.003% |
| 213 | 14.408 | 14.382 | 14.454 | VV | 219 | 7438 | 0.14% | 0.008% |
| 214 | 14.466 | 14.454 | 14.479 | VV | 261 | 3141 | 0.06% | 0.003% |
| 215 | 14.504 | 14.479 | 14.528 | VV | 254 | 5347 | 0.10% | 0.006% |
| 216 | 14.553 | 14.528 | 14.593 | VV | 254 | 5382 | 0.10% | 0.006% |
| 217 | 14.650 | 14.593 | 14.660 | VV | 1375 | 17815 | 0.34% | 0.019% |
| 218 | 14.698 | 14.660 | 14.804 | VV | 386026 | 4883489 | 93.15% | 5.244% |
| 219 | 14.810 | 14.804 | 14.848 | VV | 174 | 2817 | 0.05% | 0.003% |
| 220 | 14.862 | 14.848 | 14.895 | VV | 272 | 4676 | 0.09% | 0.005% |
| 221 | 14.903 | 14.895 | 14.982 | VV | 154 | 3812 | 0.07% | 0.004% |
| 222 | 15.005 | 14.982 | 15.028 | PV | 110 | 1465 | 0.03% | 0.002% |
| 223 | 15.034 | 15.028 | 15.064 | VV | 72 | 1045 | 0.02% | 0.001% |
| 224 | 15.071 | 15.064 | 15.081 | PV | 52 | 564 | 0.01% | 0.001% |
| 225 | 15.099 | 15.081 | 15.106 | VV | 76 | 744 | 0.01% | 0.001% |
| 226 | 15.121 | 15.106 | 15.149 | VV | 197 | 2648 | 0.05% | 0.003% |
| 227 | 15.179 | 15.149 | 15.191 | VV | 189 | 3034 | 0.06% | 0.003% |
| 228 | 15.216 | 15.191 | 15.242 | VV | 743 | 10558 | 0.20% | 0.011% |
| 229 | 15.250 | 15.242 | 15.290 | VV | 145 | 2073 | 0.04% | 0.002% |
| 230 | 15.345 | 15.290 | 15.358 | VV | 109 | 3240 | 0.06% | 0.003% |
| 231 | 15.366 | 15.358 | 15.381 | VV | 163 | 1855 | 0.04% | 0.002% |
| 232 | 15.404 | 15.381 | 15.438 | VV | 197 | 4854 | 0.09% | 0.005% |
| 233 | 15.453 | 15.438 | 15.486 | VV | 159 | 2776 | 0.05% | 0.003% |
| 234 | 15.566 | 15.486 | 15.631 | PV | 255 | 13223 | 0.25% | 0.014% |
| 235 | 15.642 | 15.631 | 15.650 | VV | 152 | 1100 | 0.02% | 0.001% |
| 236 | 15.716 | 15.650 | 15.799 | VV | 364062 | 4792630 | 91.41% | 5.147% |
| 237 | 15.807 | 15.799 | 15.855 | VV | 210 | 4354 | 0.08% | 0.005% |
| 238 | 15.866 | 15.855 | 15.903 | VV | 120 | 2876 | 0.05% | 0.003% |
| 239 | 15.917 | 15.903 | 15.934 | VV | 189 | 1603 | 0.03% | 0.002% |
| 240 | 15.943 | 15.934 | 15.971 | VV | 96 | 695 | 0.01% | 0.001% |
| 241 | 16.019 | 15.971 | 16.044 | PV | 76 | 2001 | 0.04% | 0.002% |
| 242 | 16.049 | 16.044 | 16.061 | VV | 63 | 383 | 0.01% | 0.000% |
| 243 | 16.117 | 16.061 | 16.128 | PV | 84 | 1906 | 0.04% | 0.002% |
| 244 | 16.135 | 16.128 | 16.144 | VV | 85 | 369 | 0.01% | 0.000% |
| 245 | 16.158 | 16.144 | 16.173 | VV | 225 | 2271 | 0.04% | 0.002% |
| 246 | 16.197 | 16.173 | 16.236 | VV | 1198 | 18135 | 0.35% | 0.019% |

**Manual IntegrationsAPPROVED**

Reviewed By :Yogesh Patel 03/05/2025
Supervised By :Ankita Jodhani 03/05/2025

**Instrument :**
FID_C
**ClientSampleId :**
P001-CLAY-CF01-01MSD

**Manual IntegrationsAPPROVED**

Reviewed By :Yogesh Patel 03/05/2025
Supervised By :Ankita Jodhani 03/05/2025

rteres

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 247 | 16.271 | 16.236 | 16.288 | VV | 149 | 2922 | 0.06% | 0.003% |
| 248 | 16.319 | 16.288 | 16.339 | VV | 112 | 2403 | | |
| 249 | 16.369 | 16.339 | 16.381 | VV | 129 | 2946 | | |
| 250 | 16.403 | 16.381 | 16.418 | VV | 179 | 2981 | | |
| 251 | 16.430 | 16.418 | 16.472 | VV | 149 | 3426 | | |
| 252 | 16.496 | 16.472 | 16.520 | VV | 169 | 3204 | | |
| 253 | 16.545 | 16.520 | 16.579 | VV | 506 | 9769 | 0.19% | 0.010% |
| 254 | 16.665 | 16.579 | 16.734 | VV | 337919 | 4702369 | 89.69% | 5.050% |
| 255 | 16.745 | 16.734 | 16.798 | VV | 272 | 6480 | 0.12% | 0.007% |
| 256 | 16.804 | 16.798 | 16.811 | VV | 98 | 699 | 0.01% | 0.001% |
| 257 | 16.823 | 16.811 | 16.884 | VV | 161 | 3419 | 0.07% | 0.004% |
| 258 | 16.892 | 16.884 | 16.899 | PV | 88 | 340 | 0.01% | 0.000% |
| 259 | 16.962 | 16.899 | 16.980 | VV | 93 | 1414 | 0.03% | 0.002% |
| 260 | 16.998 | 16.980 | 17.024 | VV | 99 | 1275 | 0.02% | 0.001% |
| 261 | 17.032 | 17.024 | 17.061 | PV | 91 | 1067 | 0.02% | 0.001% |
| 262 | 17.112 | 17.061 | 17.204 | VV | 1584 | 25562 | 0.49% | 0.027% |
| 263 | 17.226 | 17.204 | 17.241 | VV | 138 | 1900 | 0.04% | 0.002% |
| 264 | 17.255 | 17.241 | 17.327 | VV | 112 | 4186 | 0.08% | 0.004% |
| 265 | 17.439 | 17.327 | 17.481 | VV | 3412 | 53858 | 1.03% | 0.058% |
| 266 | 17.551 | 17.481 | 17.694 | VV | 337255 | 4704024 | 89.72% | 5.052% |
| 267 | 17.708 | 17.694 | 17.790 | VV | 174 | 4839 | 0.09% | 0.005% |
| 268 | 17.839 | 17.790 | 17.865 | PV | 159 | 4720 | 0.09% | 0.005% |
| 269 | 17.970 | 17.865 | 18.018 | VV | 2102 | 33919 | 0.65% | 0.036% |
| 270 | 18.099 | 18.018 | 18.118 | VV | 142 | 4417 | 0.08% | 0.005% |
| 271 | 18.236 | 18.118 | 18.303 | VV | 257 | 12180 | 0.23% | 0.013% |
| 272 | 18.383 | 18.303 | 18.465 | PV | 317148 | 4523971 | 86.29% | 4.858% |
| 273 | 18.688 | 18.465 | 18.714 | VV | 140 | 14220 | 0.27% | 0.015% |
| 274 | 18.777 | 18.714 | 18.825 | PV | 2375 | 36191 | 0.69% | 0.039% |
| 275 | 18.959 | 18.825 | 18.988 | PV | 270 | 13220 | 0.25% | 0.014% |
| 276 | 19.078 | 18.988 | 19.104 | VV | 333 | 17352 | 0.33% | 0.019% |
| 277 | 19.165 | 19.104 | 19.228 | VV | 280139 | 4257596 | 81.21% | 4.572% |
| 278 | 19.257 | 19.228 | 19.284 | VV | 600 | 16381 | 0.31% | 0.018% |
| 279 | 19.324 | 19.284 | 19.348 | VV | 593 | 18272 | 0.35% | 0.020% |
| 280 | 19.464 | 19.348 | 19.514 | VV | 2265 | 144214 | 2.75% | 0.155% |
| 281 | 19.537 | 19.514 | 19.631 | VV | 2807 | 97660 | 1.86% | 0.105% |
| 282 | 19.804 | 19.631 | 19.837 | VV | 2050 | 137365 | 2.62% | 0.148% |
| 283 | 19.904 | 19.837 | 20.007 | VV | 267654 | 4035800 | 76.98% | 4.334% |
| 284 | 20.257 | 20.007 | 20.294 | VV | 2866 | 313231 | 5.97% | 0.336% |
| 285 | 20.429 | 20.294 | 20.458 | VV | 2653 | 218154 | 4.16% | 0.234% |
| 286 | 20.617 | 20.458 | 20.741 | VV | 222638 | 4172418 | 79.58% | 4.481% |
| 287 | 20.869 | 20.741 | 20.911 | VV | 2750 | 279808 | 5.34% | 0.300% |
| 288 | 20.946 | 20.911 | 20.981 | VV | 2669 | 106391 | 2.03% | 0.114% |
| 289 | 21.014 | 20.981 | 21.058 | VV | 2936 | 119645 | 2.28% | 0.128% |
| 290 | 21.298 | 21.058 | 21.317 | VV | 2018 | 332785 | 6.35% | 0.357% |
| 291 | 21.354 | 21.317 | 21.374 | VV | 1878 | 64479 | 1.23% | 0.069% |
| 292 | 21.471 | 21.374 | 21.751 | VV | 153464 | 3915630 | 74.69% | 4.205% |
| 293 | 21.765 | 21.751 | 21.811 | VV | 1247 | 40905 | 0.78% | 0.044% |
| 294 | 21.855 | 21.811 | 21.899 | VV | 936 | 48051 | 0.92% | 0.052% |
| 295 | 21.987 | 21.899 | 22.068 | VV | 895 | 71153 | 1.36% | 0.076% |
| 296 | 22.082 | 22.068 | 22.102 | VV | 533 | 9130 | 0.17% | 0.010% |
| 297 | 22.118 | 22.102 | 22.168 | VV | 401 | 12116 | 0.23% | 0.013% |
| 298 | 22.186 | 22.168 | 22.223 | VV | 311 | 4748 | 0.09% | 0.005% |

Sum of corrected areas: 93117840

rteres

Aliphatic EPH 021125.M Fri Feb 28 01:14:57 2025

**Instrument :**
FID_C
**ClientSampleId :**
P001-CLAY-CF01-01MSD

**Manual IntegrationsAPPROVED**

Reviewed By :Yogesh Patel 03/05/2025
Supervised By :Ankita Jodhani 03/05/2025

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Weston Solutions, Inc. | Date Collected: | 02/24/25 |
| Project: | RFP 905 | Date Received: | 02/24/25 |
| Client Sample ID: | P001-CLAY-CF01-01MSD | SDG No.: | Q1421 |
| Lab Sample ID: | Q1421-06 | Matrix: | Water |
| Analytical Method: | NJEPH | % Solid: | 0 |
| Sample Wt/Vol: | 1000 Units: mL | Final Vol: | 2000 uL |
| Soil Aliquot Vol: | uL | Test: | EPH |
| Prep Method : | SW3510 | | |

| File ID : | Dilution: | Prep Date : | Date Analyzed : | Prep Batch ID |
|---|---|---|---|---|
| FD049122.D | 1 | 02/26/25 | 02/27/25 | PB166883 |

| CAS Number | Parameter | | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | |
| Aromatic C10-C12 | Aromatic C10-C12 | | 189 | | 3.32 | 20.0 | ug/l |
| Aromatic C12-C16 | Aromatic C12-C16 | | 308 | | 3.69 | 30.0 | ug/l |
| Aromatic C16-C21 | Aromatic C16-C21 | | 541 | | 12.7 | 50.0 | ug/l |
| Aromatic C21-C36 | Aromatic C21-C36 | | 837 | | 25.2 | 80.0 | ug/l |
| **SURROGATES** | | | | | | | |
| 580-13-2 | 2-Bromonaphthalene (SURR) | | 52.8 | | 40 - 140 | 106% | SPK: 50 |
| 321-60-8 | 2-Flurobiphenyl (SURR) | | 53.3 | | 40 - 140 | 107% | SPK: 50 |
| 84-15-1 | ortho-Terphenyl (SURR) | | 45.3 | | 40 - 140 | 91% | SPK: 50 |

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

# Quantitation Report For Aromatic EPH Range.

| | | | |
|---|---|---|---|
| Lab Sample ID: | Q1421-06 | Acq On: | 27 Feb 2025 14:40 |
| Client Sample ID: | P001-CLAY-CF01-01MSD | Operator: | YP/AJ |
| Data file: | FD049122.D | Misc: | |
| Instrument: | FID_D | ALS Vial: | 66 |
| Dilution Factor: | 1 | Sample Multiplier: | 1.00 |

| Compound | R.T. | | Response | Conc | highest_standard | Units |
|---|---|---|---|---|---|---|
| Aromatic C10-C12 | 4.076 | 5.794 | 15048552 | 94.633 | 200 | ug/ml |
| Aromatic C12-C16 | 5.795 | 8.397 | 24789677 | 154.035 | 300 | ug/ml |
| Aromatic C16-C21 | 8.398 | 12.661 | 41500637 | 270.61 | 500 | ug/ml |
| Aromatic C21-C36 | 12.662 | 18.071 | 59957869 | 418.95 | 800 | ug/ml |
| Aromatic EPH | 4.076 | 18.071 | 141296735 | 938.227 | | ug/ml |
| 2-Bromonaphthalene (SURR) | 7.352 | 7.352 | 7560353 | 52.83 | | ug/ml |
| 2-Flurobiphenyl (SURR) | 8.203 | 8.203 | 4683693 | 53.28 | | ug/ml |
| ortho-Terphenyl (SURR) | 11.237 | 11.237 | 7325391 | 45.28 | | ug/ml |

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022725AR\
Data File : FD049122.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2025 14:40
Operator : YP/AJ
Sample : Q1421-06
Misc :
ALS Vial : 66 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF01-01MSD

Integration File: autoint1.e
Quant Time: Feb 28 01:27:56 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

| | Compound | R.T. | Response | Conc Units |
|---|---|---|---|---|
| | **System Monitoring Compounds** | | | |
| 4) S | 2-Bromonaphthalene (S... | 7.352 | 7560353 | 52.829 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 105.66% |
| 6) S | 2-Flurobiphenyl (SURR) | 8.203 | 4683693 | 53.277 ug/ml |
| Spiked Amount | 50.000 Range | 0 - 131 | Recovery = | 106.55% |
| 11) S | ortho-Terphenyl (SURR) | 11.237 | 7325391 | 45.282 ug/ml |
| Spiked Amount | 50.000 | | Recovery = | 90.56% |
| | **Target Compounds** | | | |
| 1) T | 1,2,3-Trimethylbenzen... | 4.178 | 6595022 | 41.412 ug/ml |
| 2) T | Naphthalene (C11.7) | 5.694 | 6930516 | 43.646 ug/ml |
| 3) T | 2-Methylnaphthalene (... | 6.740 | 6668796 | 42.833 ug/ml |
| 5) T | Acenaphthylene (C15.06) | 8.005 | 7230720 | 44.468 ug/ml |
| 7) T | Acenaphthene (C15.5) | 8.300 | 7741496 | 47.058 ug/ml |
| 8) T | Flouorene (C16.55) | 9.078 | 7313580 | 46.391 ug/ml |
| 9) T | Phenanthrene (C19.36) | 10.466 | 7092719 | 47.065 ug/ml |
| 10) T | Anthracene (C19.43) | 10.542 | 7066276 | 46.788 ug/ml |
| 12) T | Fluoranthene (C21.85) | 12.271 | 7124315 | 46.167 ug/ml |
| 13) T | Pyrene (C20.8) | 12.563 | 7053829 | 45.787 ug/ml |
| 14) T | Benzo[a]anthracene (C... | 14.434 | 6456102 | 49.137 ug/ml |
| 15) T | Chrysene (C27.41) | 14.476 | 6357637 | 39.321 ug/ml |
| 16) T | benzo[b]fluoranthene ... | 15.984 | 6403749 | 46.541 ug/ml |
| 17) T | Bnezo[k]fluoranthene ... | 16.016 | 6492921 | 41.109 ug/ml |
| 18) T | Benzo[a]pyrene (C31.34) | 16.358 | 6211086 | 45.758 ug/ml |
| 19) T | Indeno[1,2,3-cd]pyren... | 17.728 | 5722393 | 52.366 ug/ml |
| 20) T | Dibenz[a,h]anthracene... | 17.762 | 6455927 | 41.614 ug/ml |
| 21) T | Benzo[g,h,i]perylene ... | 17.977 | 6209398 | 42.838 ug/ml |

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

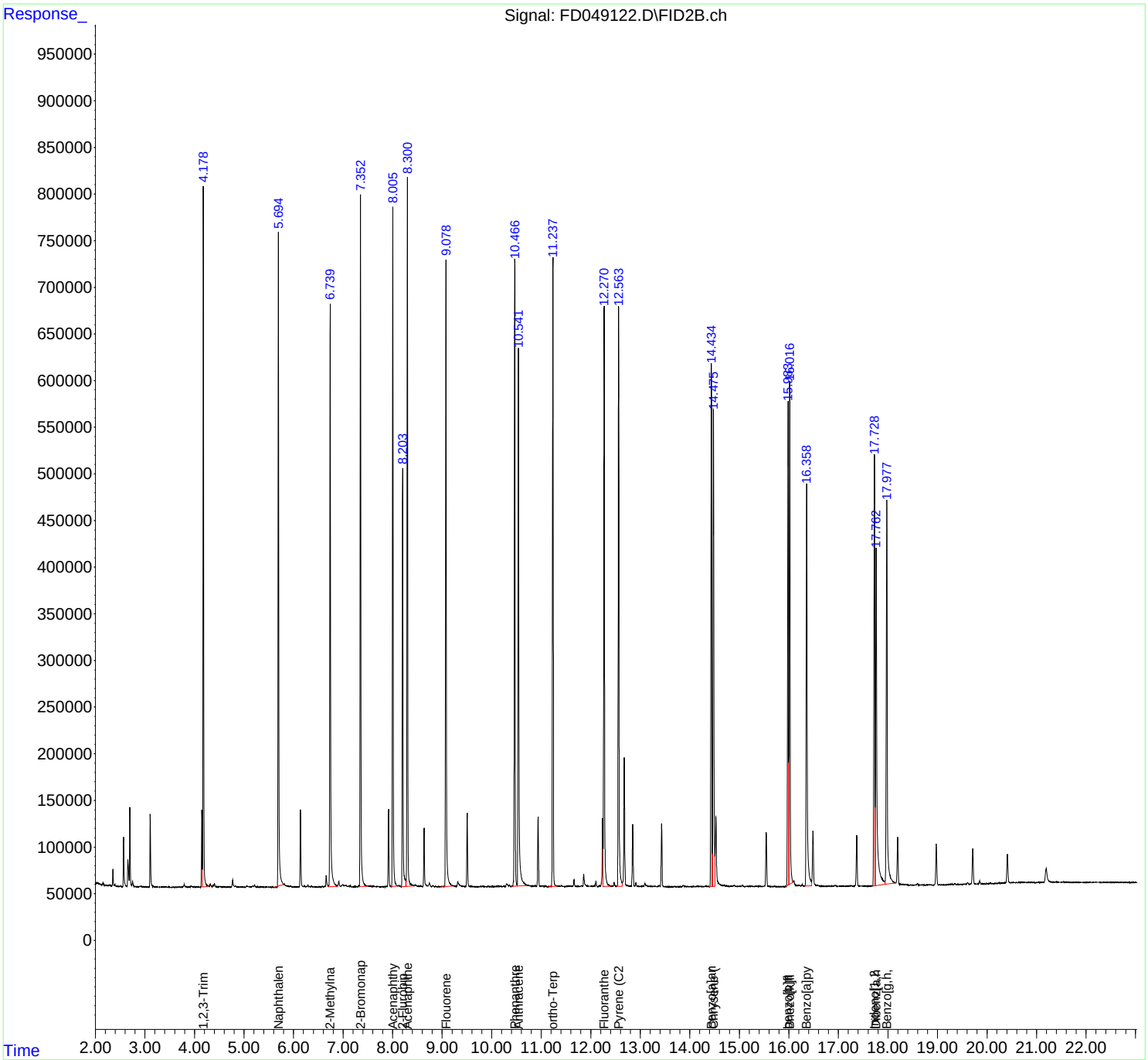
Quantitation Report (QT Reviewed)

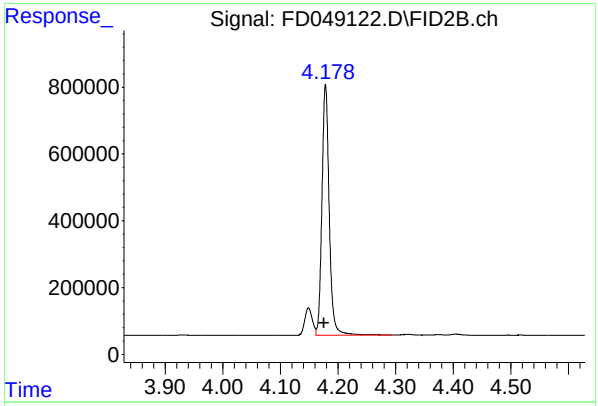
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022725AR\
Data File : FD049122.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2025 14:40
Operator : YP/AJ
Sample : Q1421-06
Misc :
ALS Vial : 66 Sample Multiplier: 1

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF01-01MSD

Integration File: autoint1.e
Quant Time: Feb 28 01:27:56 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Quant Title : GC Extractables
QLast Update : Wed Feb 12 12:54:29 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

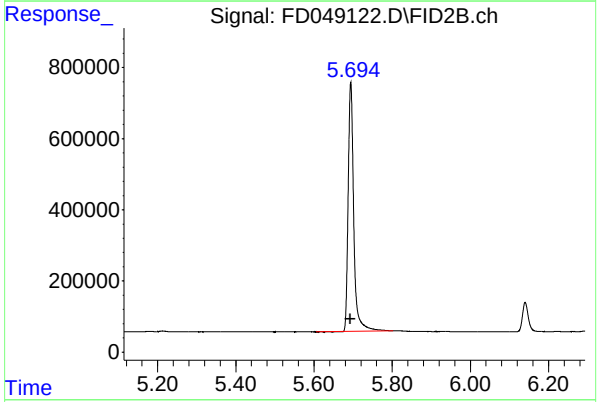





#1 1,2,3-Trimethylbenzene (C10.1)

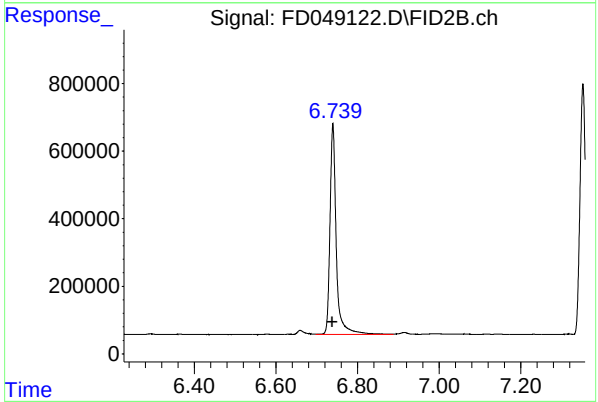
R.T.: 4.178 min
Delta R.T.: 0.002 min
Response: 6595022
Conc: 41.41 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF01-01MSD



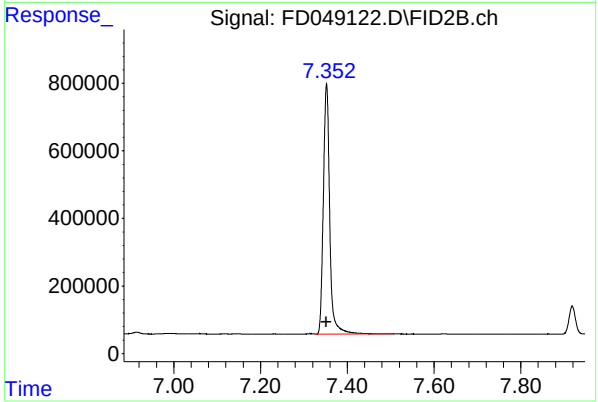

#2 Naphthalene (C11.7)

R.T.: 5.694 min
Delta R.T.: 0.001 min
Response: 6930516
Conc: 43.65 ug/ml



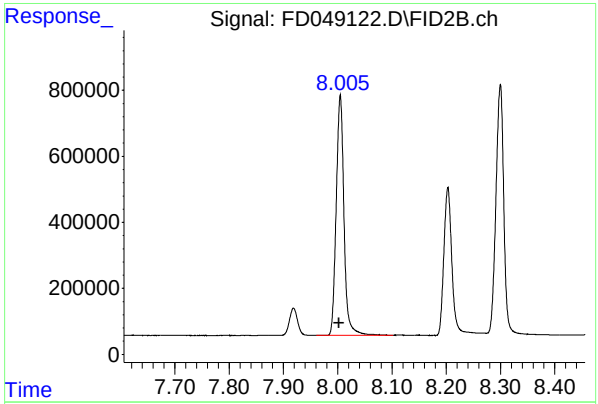

#3 2-Methylnaphthalene (C12.89)

R.T.: 6.740 min
Delta R.T.: 0.000 min
Response: 6668796
Conc: 42.83 ug/ml




#4 2-Bromonaphthalene (SURR)

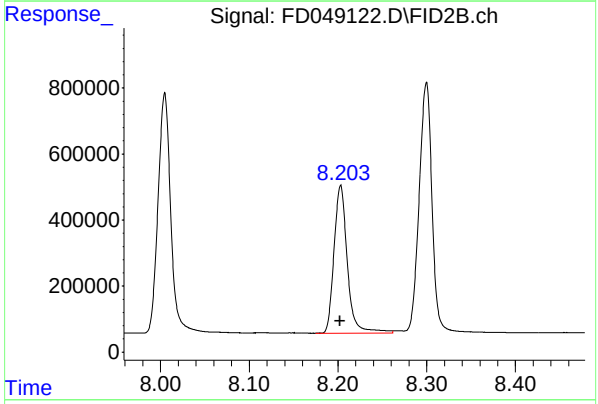
R.T.: 7.352 min
Delta R.T.: 0.000 min
Response: 7560353
Conc: 52.83 ug/ml




#5 Acenaphthylene (C15.06)

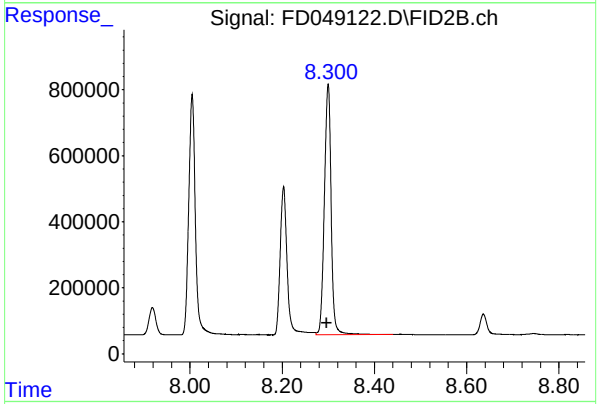
R.T.: 8.005 min
Delta R.T.: 0.002 min
Response: 7230720
Conc: 44.47 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF01-01MSD



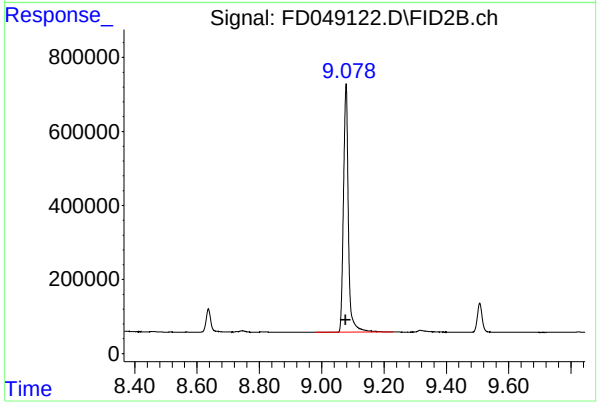

#6 2-Flurobiphenyl (SURR)

R.T.: 8.203 min
Delta R.T.: 0.000 min
Response: 4683693
Conc: 53.28 ug/ml



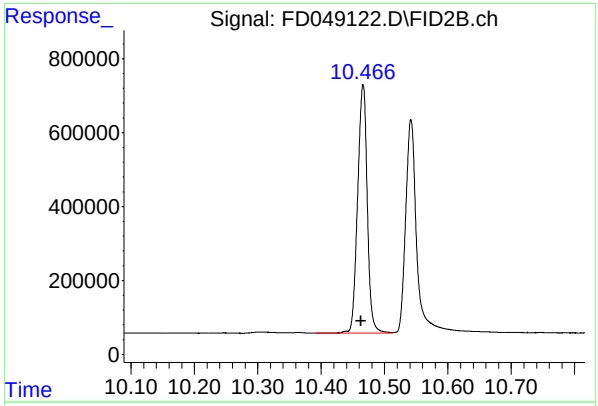

#7 Acenaphthene (C15.5)

R.T.: 8.300 min
Delta R.T.: 0.004 min
Response: 7741496
Conc: 47.06 ug/ml




#8 Flouorene (C16.55)

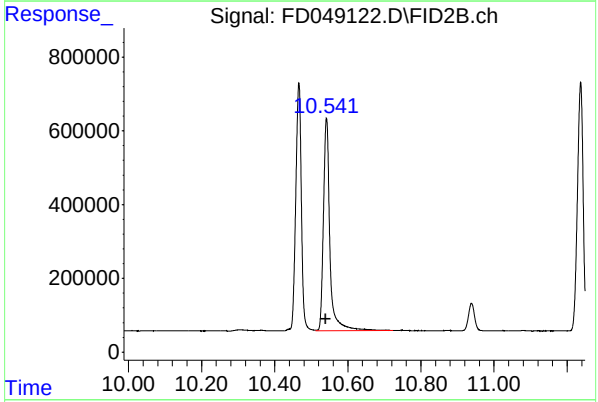
R.T.: 9.078 min
Delta R.T.: 0.002 min
Response: 7313580
Conc: 46.39 ug/ml




#9 Phenanthrene (C19.36)

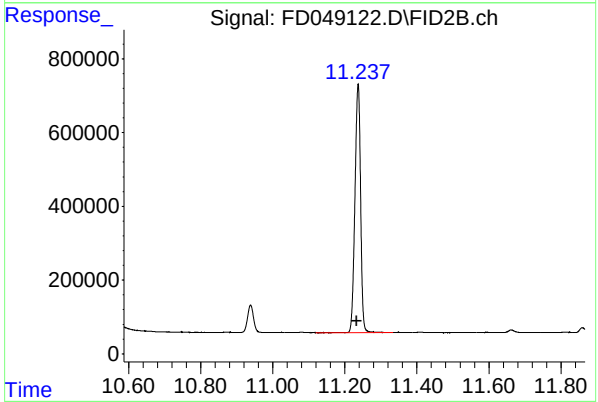
R.T.: 10.466 min
Delta R.T.: 0.003 min
Response: 7092719
Conc: 47.06 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF01-01MSD



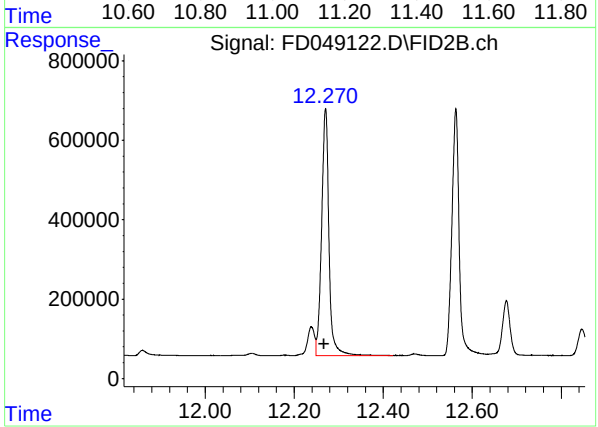

#10 Anthracene (C19.43)

R.T.: 10.542 min
Delta R.T.: 0.002 min
Response: 7066276
Conc: 46.79 ug/ml



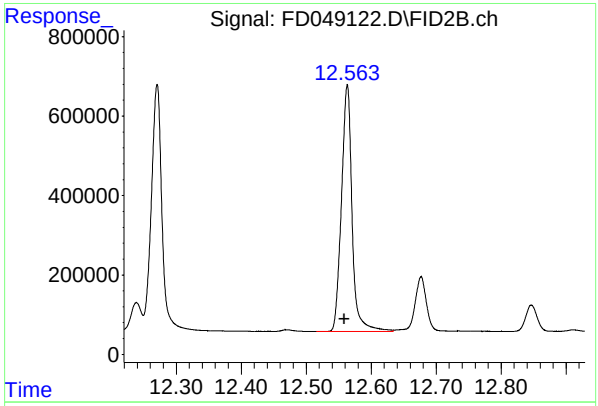

#11 ortho-Terphenyl (SURR)

R.T.: 11.237 min
Delta R.T.: 0.004 min
Response: 7325391
Conc: 45.28 ug/ml




#12 Fluoranthene (C21.85)

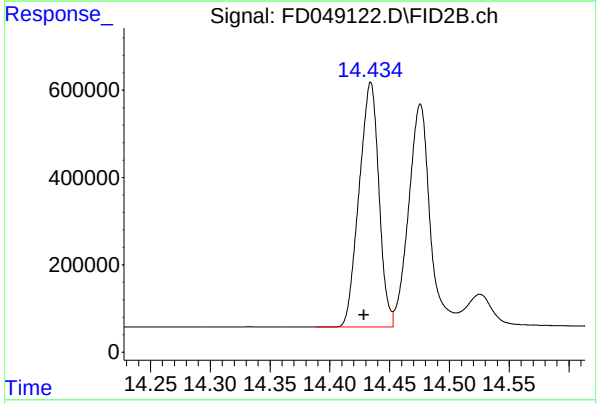
R.T.: 12.271 min
Delta R.T.: 0.004 min
Response: 7124315
Conc: 46.17 ug/ml




#13 Pyrene (C20.8)

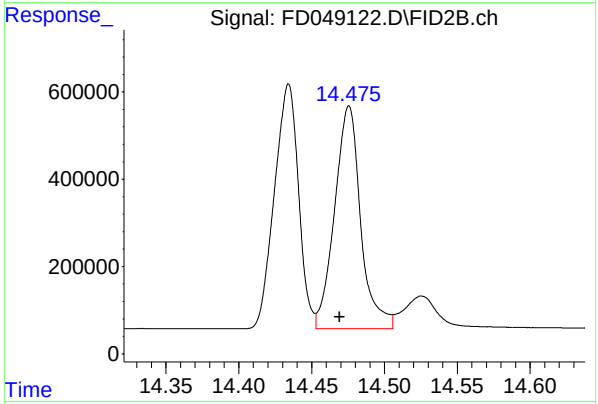
R.T.: 12.563 min
Delta R.T.: 0.005 min
Response: 7053829
Conc: 45.79 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF01-01MSD



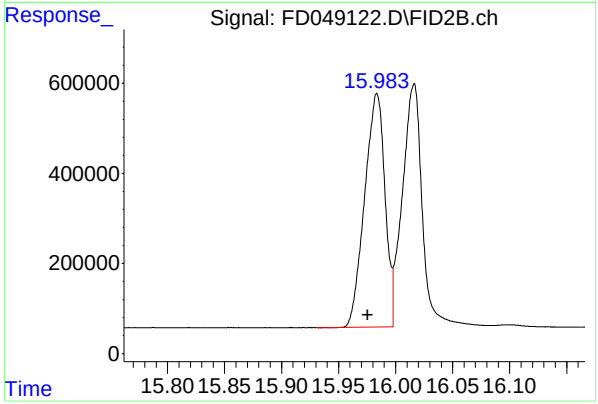

#14 Benzo[a]anthracene (C26.37)

R.T.: 14.434 min
Delta R.T.: 0.006 min
Response: 6456102
Conc: 49.14 ug/ml



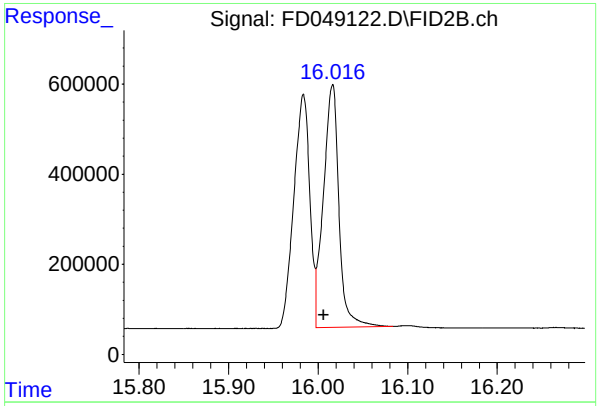

#15 Chrysene (C27.41)

R.T.: 14.476 min
Delta R.T.: 0.006 min
Response: 6357637
Conc: 39.32 ug/ml




#16 benzo[b]fluoranthene (C30.41)

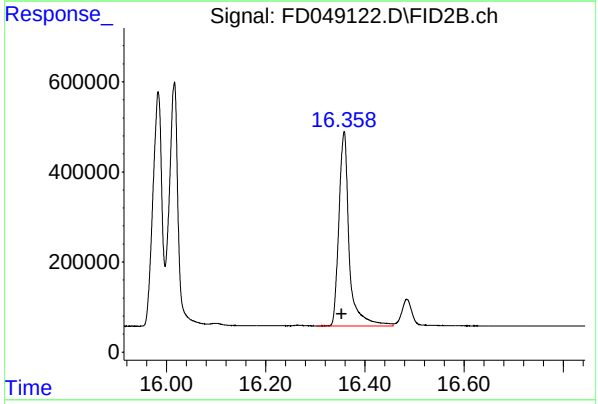
R.T.: 15.984 min
Delta R.T.: 0.008 min
Response: 6403749
Conc: 46.54 ug/ml




#17 Bnezo[k]fluoranthene (C30.14)

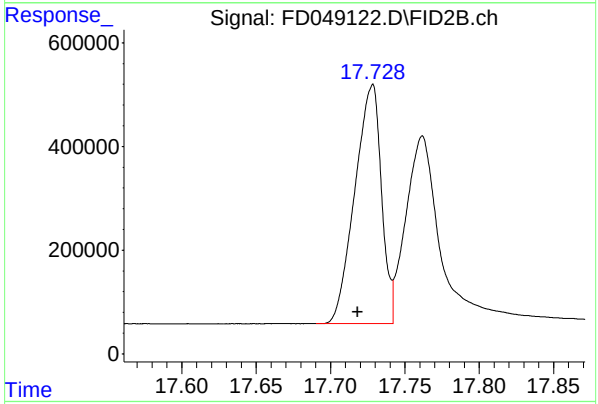
R.T.: 16.016 min
Delta R.T.: 0.010 min
Response: 6492921
Conc: 41.11 ug/ml

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF01-01MSD



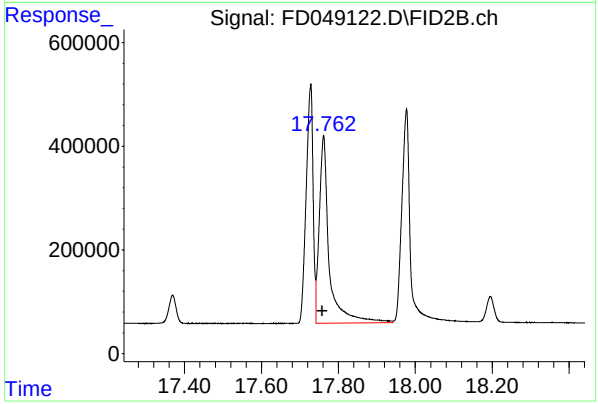

#18 Benzo[a]pyrene (C31.34)

R.T.: 16.358 min
Delta R.T.: 0.005 min
Response: 6211086
Conc: 45.76 ug/ml



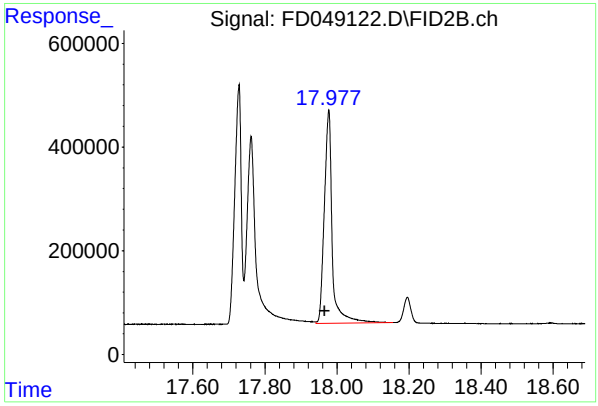

#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.728 min
Delta R.T.: 0.010 min
Response: 5722393
Conc: 52.37 ug/ml




#20 Dibenz[a,h]anthracene (C30.36)

R.T.: 17.762 min
Delta R.T.: 0.003 min
Response: 6455927
Conc: 41.61 ug/ml




#21 Benzo[g,h,i]perylene (C34.01)

R.T.: 17.977 min
Delta R.T.: 0.011 mi
Response: 6209398
Conc: 42.84 ug/m

**Instrument :**
FID_D
**ClientSampleId :**
P001-CLAY-CF01-01MSD

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD022725AR\
Data File : FD049122.D
Signal(s) : FID2B.ch
Acq On : 27 Feb 2025 14:40
Sample : Q1421-06
Misc :
ALS Vial : 66 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 021125.M
Title : GC Extractables

Signal : FID2B.ch

| peak # | R.T. min | Start min | End min | PK TY | peak height | peak area | peak % max. | % of total |
|---|---|---|---|---|---|---|---|---|
| 1 | 4.053 | 4.042 | 4.070 | BV | 249 | 1736 | 0.02% | 0.001% |
| 2 | 4.101 | 4.070 | 4.114 | PV | 266 | 3355 | 0.04% | 0.002% |
| 3 | 4.149 | 4.123 | 4.162 | PV | 82890 | 751687 | 9.61% | 0.464% |
| 4 | 4.178 | 4.162 | 4.295 | VV | 750750 | 6647294 | 85.01% | 4.105% |
| 5 | 4.320 | 4.295 | 4.357 | VV | 3294 | 61692 | 0.79% | 0.038% |
| 6 | 4.375 | 4.357 | 4.389 | VV | 2584 | 31364 | 0.40% | 0.019% |
| 7 | 4.404 | 4.389 | 4.465 | VV | 3863 | 61797 | 0.79% | 0.038% |
| 8 | 4.492 | 4.465 | 4.505 | VV | 775 | 12464 | 0.16% | 0.008% |
| 9 | 4.516 | 4.505 | 4.558 | VV | 947 | 14980 | 0.19% | 0.009% |
| 10 | 4.586 | 4.558 | 4.647 | VV | 593 | 14117 | 0.18% | 0.009% |
| 11 | 4.675 | 4.658 | 4.680 | VV | 215 | 1607 | 0.02% | 0.001% |
| 12 | 4.692 | 4.680 | 4.709 | VV | 483 | 4773 | 0.06% | 0.003% |
| 13 | 4.715 | 4.709 | 4.724 | VV | 318 | 2188 | 0.03% | 0.001% |
| 14 | 4.728 | 4.724 | 4.734 | VV | 356 | 1739 | 0.02% | 0.001% |
| 15 | 4.738 | 4.734 | 4.743 | VV | 353 | 1578 | 0.02% | 0.001% |
| 16 | 4.771 | 4.743 | 4.812 | VV | 7882 | 110722 | 1.42% | 0.068% |
| 17 | 4.829 | 4.812 | 4.861 | VV | 1684 | 24345 | 0.31% | 0.015% |
| 18 | 4.864 | 4.861 | 4.874 | VV | 309 | 2153 | 0.03% | 0.001% |
| 19 | 4.882 | 4.874 | 4.895 | VV | 408 | 3086 | 0.04% | 0.002% |
| 20 | 4.899 | 4.895 | 4.907 | VV | 298 | 1293 | 0.02% | 0.001% |
| 21 | 4.914 | 4.907 | 4.919 | VV | 308 | 1622 | 0.02% | 0.001% |
| 22 | 4.926 | 4.919 | 4.947 | VV | 336 | 4118 | 0.05% | 0.003% |
| 23 | 4.972 | 4.947 | 5.031 | VV | 516 | 13003 | 0.17% | 0.008% |
| 24 | 5.060 | 5.031 | 5.115 | VV | 1397 | 38675 | 0.49% | 0.024% |
| 25 | 5.140 | 5.115 | 5.157 | VV | 639 | 12683 | 0.16% | 0.008% |
| 26 | 5.179 | 5.157 | 5.195 | VV | 1502 | 21747 | 0.28% | 0.013% |
| 27 | 5.212 | 5.195 | 5.247 | VV | 2679 | 35632 | 0.46% | 0.022% |
| 28 | 5.250 | 5.247 | 5.255 | VV | 403 | 1975 | 0.03% | 0.001% |
| 29 | 5.272 | 5.255 | 5.290 | VV | 826 | 9298 | 0.12% | 0.006% |
| 30 | 5.297 | 5.290 | 5.316 | VV | 196 | 1884 | 0.02% | 0.001% |
| 31 | 5.338 | 5.316 | 5.347 | VV | 449 | 5017 | 0.06% | 0.003% |
| 32 | 5.358 | 5.347 | 5.372 | VV | 434 | 4863 | 0.06% | 0.003% |
| 33 | 5.382 | 5.372 | 5.385 | VV | 290 | 1742 | 0.02% | 0.001% |
| 34 | 5.402 | 5.385 | 5.406 | VV | 337 | 2954 | 0.04% | 0.002% |
| 35 | 5.423 | 5.406 | 5.441 | VV | 367 | 4939 | 0.06% | 0.003% |
| 36 | 5.463 | 5.441 | 5.474 | VV | 689 | 7575 | 0.10% | 0.005% |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 37 | 5.479 | 5.474 | 5.488 | VV | 344 | 2329 | 0.03% | 0.001% |
| 38 | 5.491 | 5.488 | 5.500 | VV | 228 | 1004 | 0.01% | 0.001% |
| 39 | 5.518 | 5.511 | 5.522 | VV | 341 | 1658 | 0.02% | 0.001% |
| 40 | 5.525 | 5.522 | 5.535 | VV | 413 | 2177 | 0.03% | 0.001% |
| 41 | 5.538 | 5.535 | 5.554 | VV | 204 | 1602 | 0.02% | 0.001% |
| 42 | 5.563 | 5.554 | 5.580 | VV | 304 | 2500 | 0.03% | 0.002% |
| 43 | 5.585 | 5.580 | 5.609 | VV | 208 | 1691 | 0.02% | 0.001% |
| 44 | 5.635 | 5.624 | 5.649 | VV | 244 | 1608 | 0.02% | 0.001% |
| 45 | 5.659 | 5.649 | 5.667 | VV | 205 | 1444 | 0.02% | 0.001% |
| 46 | 5.694 | 5.667 | 5.802 | VV | 702662 | 7112578 | 90.96% | 4.392% |
| 47 | 5.813 | 5.802 | 5.857 | VV | 3530 | 82128 | 1.05% | 0.051% |
| 48 | 5.861 | 5.857 | 5.907 | VV | 1541 | 36980 | 0.47% | 0.023% |
| 49 | 5.910 | 5.907 | 5.917 | VV | 894 | 5101 | 0.07% | 0.003% |
| 50 | 5.940 | 5.917 | 5.982 | VV | 1202 | 31504 | 0.40% | 0.019% |
| 51 | 5.987 | 5.982 | 5.994 | VV | 545 | 3239 | 0.04% | 0.002% |
| 52 | 6.008 | 5.994 | 6.012 | VV | 523 | 5358 | 0.07% | 0.003% |
| 53 | 6.029 | 6.012 | 6.044 | VV | 638 | 8588 | 0.11% | 0.005% |
| 54 | 6.048 | 6.044 | 6.059 | VV | 533 | 3360 | 0.04% | 0.002% |
| 55 | 6.086 | 6.059 | 6.110 | VV | 503 | 11993 | 0.15% | 0.007% |
| 56 | 6.140 | 6.110 | 6.204 | VV | 83059 | 880436 | 11.26% | 0.544% |
| 57 | 6.222 | 6.204 | 6.249 | VV | 1461 | 22443 | 0.29% | 0.014% |
| 58 | 6.262 | 6.249 | 6.274 | VV | 1067 | 11475 | 0.15% | 0.007% |
| 59 | 6.293 | 6.274 | 6.309 | VV | 2340 | 28808 | 0.37% | 0.018% |
| 60 | 6.321 | 6.309 | 6.349 | VV | 860 | 13854 | 0.18% | 0.009% |
| 61 | 6.364 | 6.349 | 6.389 | VV | 1443 | 19975 | 0.26% | 0.012% |
| 62 | 6.393 | 6.389 | 6.399 | VV | 471 | 2335 | 0.03% | 0.001% |
| 63 | 6.406 | 6.399 | 6.415 | VV | 434 | 3270 | 0.04% | 0.002% |
| 64 | 6.419 | 6.415 | 6.437 | VV | 341 | 3558 | 0.05% | 0.002% |
| 65 | 6.445 | 6.437 | 6.459 | VV | 421 | 4099 | 0.05% | 0.003% |
| 66 | 6.471 | 6.459 | 6.490 | VV | 496 | 5877 | 0.08% | 0.004% |
| 67 | 6.510 | 6.490 | 6.515 | VV | 485 | 5168 | 0.07% | 0.003% |
| 68 | 6.519 | 6.515 | 6.524 | VV | 442 | 1589 | 0.02% | 0.001% |
| 69 | 6.540 | 6.524 | 6.556 | VV | 359 | 5164 | 0.07% | 0.003% |
| 70 | 6.578 | 6.556 | 6.610 | VV | 1410 | 21367 | 0.27% | 0.013% |
| 71 | 6.630 | 6.610 | 6.644 | VV | 1201 | 17686 | 0.23% | 0.011% |
| 72 | 6.660 | 6.644 | 6.698 | VV | 12552 | 165019 | 2.11% | 0.102% |
| 73 | 6.704 | 6.698 | 6.710 | VV | 1579 | 10496 | 0.13% | 0.006% |
| 74 | 6.740 | 6.710 | 6.887 | VV | 624924 | 6740398 | 86.20% | 4.162% |
| 75 | 6.915 | 6.887 | 6.953 | VV | 6547 | 109248 | 1.40% | 0.067% |
| 76 | 6.992 | 6.953 | 7.017 | VV | 2843 | 76296 | 0.98% | 0.047% |
| 77 | 7.025 | 7.017 | 7.032 | VV | 1861 | 15994 | 0.20% | 0.010% |
| 78 | 7.044 | 7.032 | 7.055 | VV | 1903 | 25399 | 0.32% | 0.016% |
| 79 | 7.061 | 7.055 | 7.085 | VV | 1954 | 25376 | 0.32% | 0.016% |
| 80 | 7.089 | 7.085 | 7.097 | VV | 932 | 5918 | 0.08% | 0.004% |
| 81 | 7.115 | 7.097 | 7.132 | VV | 1442 | 23190 | 0.30% | 0.014% |
| 82 | 7.148 | 7.132 | 7.179 | VV | 1786 | 27624 | 0.35% | 0.017% |
| 83 | 7.200 | 7.179 | 7.209 | VV | 460 | 6437 | 0.08% | 0.004% |
| 84 | 7.232 | 7.209 | 7.252 | VV | 1142 | 18081 | 0.23% | 0.011% |
| 85 | 7.256 | 7.252 | 7.262 | VV | 592 | 2954 | 0.04% | 0.002% |
| 86 | 7.272 | 7.262 | 7.284 | VV | 600 | 7044 | 0.09% | 0.004% |
| 87 | 7.288 | 7.284 | 7.299 | VV | 576 | 4730 | 0.06% | 0.003% |
| 88 | 7.316 | 7.299 | 7.328 | VV | 2003 | 23537 | 0.30% | 0.015% |
| 89 | 7.352 | 7.328 | 7.506 | VV | 741774 | 7657779 | 97.93% | 4.729% |

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|---|---|---|---|---|---|---|---|---|
| 90 | 7.513 | 7.506 | 7.535 | VV | 1332 | 19183 | 0.25% | 0.012% |
| 91 | 7.542 | 7.535 | 7.546 | VV | 1028 | 6205 | 0.08% | 0.004% |
| 92 | 7.551 | 7.546 | 7.567 | VV | 1213 | 11522 | 0.15% | 0.007% |
| 93 | 7.574 | 7.567 | 7.602 | VV | 983 | 16378 | 0.21% | 0.010% |
| 94 | 7.622 | 7.602 | 7.645 | VV | 1411 | 22044 | 0.28% | 0.014% |
| 95 | 7.648 | 7.645 | 7.656 | VV | 616 | 3510 | 0.04% | 0.002% |
| 96 | 7.666 | 7.656 | 7.670 | VV | 536 | 4439 | 0.06% | 0.003% |
| 97 | 7.675 | 7.670 | 7.682 | VV | 599 | 4215 | 0.05% | 0.003% |
| 98 | 7.684 | 7.682 | 7.695 | VV | 647 | 4683 | 0.06% | 0.003% |
| 99 | 7.716 | 7.695 | 7.740 | VV | 833 | 16367 | 0.21% | 0.010% |
| 100 | 7.749 | 7.740 | 7.770 | VV | 452 | 7305 | 0.09% | 0.005% |
| 101 | 7.794 | 7.770 | 7.818 | VV | 603 | 13135 | 0.17% | 0.008% |
| 102 | 7.834 | 7.818 | 7.850 | VV | 595 | 9121 | 0.12% | 0.006% |
| 103 | 7.865 | 7.850 | 7.885 | VV | 1138 | 15403 | 0.20% | 0.010% |
| 104 | 7.919 | 7.885 | 7.972 | VV | 83558 | 885796 | 11.33% | 0.547% |
| 105 | 7.975 | 7.972 | 7.978 | VV | 635 | 2395 | 0.03% | 0.001% |
| 106 | 8.005 | 7.978 | 8.099 | VV | 729213 | 7302190 | 93.38% | 4.509% |
| 107 | 8.116 | 8.099 | 8.133 | VV | 1631 | 28053 | 0.36% | 0.017% |
| 108 | 8.148 | 8.133 | 8.173 | VV | 1378 | 22466 | 0.29% | 0.014% |
| 109 | 8.203 | 8.173 | 8.262 | VV | 449899 | 4714958 | 60.29% | 2.912% |
| 110 | 8.267 | 8.262 | 8.273 | VV | 7597 | 52321 | 0.67% | 0.032% |
| 111 | 8.300 | 8.273 | 8.404 | VV | 762387 | 7819850 | 100.00% | 4.829% |
| 112 | 8.407 | 8.404 | 8.441 | VV | 2062 | 42493 | 0.54% | 0.026% |
| 113 | 8.456 | 8.441 | 8.498 | VV | 2399 | 60065 | 0.77% | 0.037% |
| 114 | 8.515 | 8.498 | 8.544 | VV | 1317 | 27004 | 0.35% | 0.017% |
| 115 | 8.566 | 8.544 | 8.598 | VV | 1190 | 27708 | 0.35% | 0.017% |
| 116 | 8.636 | 8.598 | 8.683 | VV | 63382 | 697296 | 8.92% | 0.431% |
| 117 | 8.689 | 8.683 | 8.712 | VV | 1852 | 27404 | 0.35% | 0.017% |
| 118 | 8.745 | 8.712 | 8.794 | VV | 4650 | 99243 | 1.27% | 0.061% |
| 119 | 8.820 | 8.794 | 8.847 | VV | 1756 | 33168 | 0.42% | 0.020% |
| 120 | 8.852 | 8.847 | 8.857 | VV | 588 | 3192 | 0.04% | 0.002% |
| 121 | 8.870 | 8.857 | 8.897 | VV | 897 | 14797 | 0.19% | 0.009% |
| 122 | 8.902 | 8.897 | 8.908 | VV | 538 | 3143 | 0.04% | 0.002% |
| 123 | 8.929 | 8.908 | 8.941 | VV | 708 | 10569 | 0.14% | 0.007% |
| 124 | 8.952 | 8.941 | 8.990 | VV | 707 | 17627 | 0.23% | 0.011% |
| 125 | 9.016 | 8.990 | 9.028 | VV | 854 | 15145 | 0.19% | 0.009% |
| 126 | 9.040 | 9.028 | 9.050 | VV | 761 | 8664 | 0.11% | 0.005% |
| 127 | 9.078 | 9.050 | 9.229 | VV | 672347 | 7411495 | 94.78% | 4.577% |
| 128 | 9.246 | 9.229 | 9.269 | VV | 1507 | 28603 | 0.37% | 0.018% |
| 129 | 9.276 | 9.269 | 9.280 | VV | 1060 | 6302 | 0.08% | 0.004% |
| 130 | 9.316 | 9.280 | 9.422 | VV | 5798 | 176438 | 2.26% | 0.109% |
| 131 | 9.438 | 9.422 | 9.463 | VV | 885 | 17798 | 0.23% | 0.011% |
| 132 | 9.470 | 9.463 | 9.480 | VV | 614 | 5864 | 0.07% | 0.004% |
| 133 | 9.507 | 9.480 | 9.552 | VV | 79053 | 858175 | 10.97% | 0.530% |
| 134 | 9.557 | 9.552 | 9.569 | VV | 773 | 6727 | 0.09% | 0.004% |
| 135 | 9.582 | 9.569 | 9.616 | VV | 916 | 22740 | 0.29% | 0.014% |
| 136 | 9.619 | 9.616 | 9.641 | VV | 654 | 8471 | 0.11% | 0.005% |
| 137 | 9.655 | 9.641 | 9.670 | VV | 629 | 8431 | 0.11% | 0.005% |
| 138 | 9.678 | 9.670 | 9.708 | VV | 591 | 8733 | 0.11% | 0.005% |
| 139 | 9.756 | 9.708 | 9.762 | VV | 621 | 12694 | 0.16% | 0.008% |
| 140 | 9.767 | 9.762 | 9.774 | VV | 537 | 3343 | 0.04% | 0.002% |
| 141 | 9.778 | 9.774 | 9.786 | VV | 533 | 3532 | 0.05% | 0.002% |

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|---|---|---|---|---|---|---|---|---|
| 142 | 9.794 | 9.786 | 9.798 | VV | 552 | 3392 | 0.04% | 0.002% |
| 143 | 9.824 | 9.798 | 9.865 | VV | 1361 | 30883 | 0.39% | 0.019% |
| 144 | 9.869 | 9.865 | 9.889 | VV | 709 | 8975 | 0.11% | 0.006% |
| 145 | 9.899 | 9.889 | 9.904 | VV | 653 | 5342 | 0.07% | 0.003% |
| 146 | 9.908 | 9.904 | 9.919 | VV | 607 | 4756 | 0.06% | 0.003% |
| 147 | 9.930 | 9.919 | 9.960 | VV | 794 | 16527 | 0.21% | 0.010% |
| 148 | 9.982 | 9.960 | 9.995 | VV | 726 | 13052 | 0.17% | 0.008% |
| 149 | 10.011 | 9.995 | 10.032 | VV | 1247 | 16626 | 0.21% | 0.010% |
| 150 | 10.037 | 10.032 | 10.042 | VV | 604 | 2983 | 0.04% | 0.002% |
| 151 | 10.046 | 10.042 | 10.070 | VV | 579 | 9278 | 0.12% | 0.006% |
| 152 | 10.076 | 10.070 | 10.086 | VV | 732 | 6115 | 0.08% | 0.004% |
| 153 | 10.102 | 10.086 | 10.114 | VV | 923 | 12974 | 0.17% | 0.008% |
| 154 | 10.133 | 10.114 | 10.157 | VV | 1069 | 20714 | 0.26% | 0.013% |
| 155 | 10.179 | 10.157 | 10.206 | VV | 985 | 20586 | 0.26% | 0.013% |
| 156 | 10.214 | 10.206 | 10.217 | VV | 511 | 2706 | 0.03% | 0.002% |
| 157 | 10.246 | 10.217 | 10.277 | VV | 1184 | 27353 | 0.35% | 0.017% |
| 158 | 10.305 | 10.277 | 10.343 | VV | 3666 | 85944 | 1.10% | 0.053% |
| 159 | 10.363 | 10.343 | 10.385 | VV | 2212 | 37811 | 0.48% | 0.023% |
| 160 | 10.401 | 10.385 | 10.405 | VV | 768 | 8085 | 0.10% | 0.005% |
| 161 | 10.466 | 10.405 | 10.513 | VV | 673477 | 7149173 | 91.42% | 4.415% |
| 162 | 10.542 | 10.513 | 10.689 | VV | 578062 | 7199120 | 92.06% | 4.446% |
| 163 | 10.694 | 10.689 | 10.724 | VV | 2588 | 47489 | 0.61% | 0.029% |
| 164 | 10.727 | 10.724 | 10.733 | VV | 1876 | 11008 | 0.14% | 0.007% |
| 165 | 10.746 | 10.733 | 10.777 | VV | 2175 | 43934 | 0.56% | 0.027% |
| 166 | 10.790 | 10.777 | 10.843 | VV | 1298 | 41975 | 0.54% | 0.026% |
| 167 | 10.872 | 10.843 | 10.905 | VV | 1786 | 41635 | 0.53% | 0.026% |
| 168 | 10.939 | 10.905 | 11.015 | VV | 75292 | 904943 | 11.57% | 0.559% |
| 169 | 11.028 | 11.015 | 11.061 | VV | 1199 | 25707 | 0.33% | 0.016% |
| 170 | 11.079 | 11.061 | 11.106 | VV | 1404 | 24067 | 0.31% | 0.015% |
| 171 | 11.115 | 11.106 | 11.135 | VV | 535 | 6452 | 0.08% | 0.004% |
| 172 | 11.152 | 11.135 | 11.157 | VV | 506 | 5352 | 0.07% | 0.003% |
| 173 | 11.182 | 11.157 | 11.200 | VV | 753 | 13572 | 0.17% | 0.008% |
| 174 | 11.237 | 11.200 | 11.315 | VV | 675130 | 7368103 | 94.22% | 4.550% |
| 175 | 11.318 | 11.315 | 11.340 | VV | 1110 | 15150 | 0.19% | 0.009% |
| 176 | 11.348 | 11.340 | 11.385 | VV | 1085 | 22886 | 0.29% | 0.014% |
| 177 | 11.412 | 11.385 | 11.429 | VV | 1570 | 27739 | 0.35% | 0.017% |
| 178 | 11.438 | 11.429 | 11.445 | VV | 722 | 6035 | 0.08% | 0.004% |
| 179 | 11.453 | 11.445 | 11.491 | VV | 654 | 13734 | 0.18% | 0.008% |
| 180 | 11.504 | 11.491 | 11.522 | VV | 890 | 12672 | 0.16% | 0.008% |
| 181 | 11.535 | 11.522 | 11.555 | VV | 1112 | 19312 | 0.25% | 0.012% |
| 182 | 11.563 | 11.555 | 11.575 | VV | 1142 | 12400 | 0.16% | 0.008% |
| 183 | 11.593 | 11.575 | 11.617 | VV | 1295 | 24536 | 0.31% | 0.015% |
| 184 | 11.621 | 11.617 | 11.636 | VV | 707 | 7461 | 0.10% | 0.005% |
| 185 | 11.662 | 11.636 | 11.694 | VV | 7936 | 104141 | 1.33% | 0.064% |
| 186 | 11.701 | 11.694 | 11.720 | VV | 852 | 11635 | 0.15% | 0.007% |
| 187 | 11.732 | 11.720 | 11.749 | VV | 906 | 12756 | 0.16% | 0.008% |
| 188 | 11.758 | 11.749 | 11.776 | VV | 817 | 10948 | 0.14% | 0.007% |
| 189 | 11.816 | 11.776 | 11.838 | VV | 1596 | 37498 | 0.48% | 0.023% |
| 190 | 11.859 | 11.838 | 11.959 | VV | 13848 | 241065 | 3.08% | 0.149% |
| 191 | 11.963 | 11.959 | 11.996 | VV | 870 | 17265 | 0.22% | 0.011% |
| 192 | 12.014 | 11.996 | 12.027 | VV | 1029 | 15927 | 0.20% | 0.010% |
| 193 | 12.032 | 12.027 | 12.044 | VV | 795 | 6926 | 0.09% | 0.004% |
| 194 | 12.049 | 12.044 | 12.055 | VV | 825 | 5216 | 0.07% | 0.003% |

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|---|---|---|---|---|---|---|---|---|
| 195 | 12.072 | 12.055 | 12.084 | VV | 1263 | 19169 | 0.25% | 0.012% |
| 196 | 12.105 | 12.084 | 12.133 | VV | 6341 | 87468 | 1.12% | 0.054% |
| 197 | 12.139 | 12.133 | 12.157 | VV | 583 | 6311 | 0.08% | 0.004% |
| 198 | 12.179 | 12.157 | 12.200 | VV | 1854 | 27176 | 0.35% | 0.017% |
| 199 | 12.239 | 12.200 | 12.249 | VV | 73528 | 820528 | 10.49% | 0.507% |
| 200 | 12.271 | 12.249 | 12.422 | VV | 622768 | 7198171 | 92.05% | 4.445% |
| 201 | 12.431 | 12.422 | 12.435 | VV | 1011 | 7662 | 0.10% | 0.005% |
| 202 | 12.441 | 12.435 | 12.449 | VV | 970 | 7514 | 0.10% | 0.005% |
| 203 | 12.470 | 12.449 | 12.517 | VV | 4949 | 81277 | 1.04% | 0.050% |
| 204 | 12.563 | 12.517 | 12.634 | VV | 622295 | 7104666 | 90.85% | 4.387% |
| 205 | 12.677 | 12.634 | 12.720 | VV | 138745 | 1726026 | 22.07% | 1.066% |
| 206 | 12.735 | 12.720 | 12.795 | VV | 1867 | 58240 | 0.74% | 0.036% |
| 207 | 12.801 | 12.795 | 12.816 | VV | 932 | 10617 | 0.14% | 0.007% |
| 208 | 12.847 | 12.816 | 12.885 | VV | 67122 | 831019 | 10.63% | 0.513% |
| 209 | 12.911 | 12.885 | 12.951 | VV | 4588 | 77240 | 0.99% | 0.048% |
| 210 | 12.957 | 12.951 | 12.985 | VV | 685 | 11732 | 0.15% | 0.007% |
| 211 | 13.009 | 12.985 | 13.020 | VV | 736 | 11455 | 0.15% | 0.007% |
| 212 | 13.047 | 13.020 | 13.056 | VV | 1014 | 17620 | 0.23% | 0.011% |
| 213 | 13.060 | 13.056 | 13.072 | VV | 985 | 7081 | 0.09% | 0.004% |
| 214 | 13.089 | 13.072 | 13.202 | VV | 3606 | 116550 | 1.49% | 0.072% |
| 215 | 13.207 | 13.202 | 13.210 | VV | 627 | 2662 | 0.03% | 0.002% |
| 216 | 13.224 | 13.210 | 13.247 | VV | 762 | 14800 | 0.19% | 0.009% |
| 217 | 13.261 | 13.247 | 13.268 | VV | 787 | 8276 | 0.11% | 0.005% |
| 218 | 13.280 | 13.268 | 13.285 | VV | 785 | 7567 | 0.10% | 0.005% |
| 219 | 13.289 | 13.285 | 13.317 | VV | 695 | 12342 | 0.16% | 0.008% |
| 220 | 13.330 | 13.317 | 13.346 | VV | 489 | 7623 | 0.10% | 0.005% |
| 221 | 13.377 | 13.346 | 13.401 | VV | 1589 | 29793 | 0.38% | 0.018% |
| 222 | 13.430 | 13.401 | 13.476 | VV | 68065 | 822164 | 10.51% | 0.508% |
| 223 | 13.483 | 13.476 | 13.522 | VV | 594 | 11369 | 0.15% | 0.007% |
| 224 | 13.526 | 13.522 | 13.536 | VV | 323 | 1962 | 0.03% | 0.001% |
| 225 | 13.541 | 13.536 | 13.562 | VV | 314 | 2519 | 0.03% | 0.002% |
| 226 | 13.568 | 13.562 | 13.589 | PV | 337 | 3016 | 0.04% | 0.002% |
| 227 | 13.611 | 13.589 | 13.639 | VV | 339 | 5534 | 0.07% | 0.003% |
| 228 | 13.645 | 13.639 | 13.667 | VV | 331 | 3896 | 0.05% | 0.002% |
| 229 | 13.672 | 13.667 | 13.687 | VV | 311 | 2596 | 0.03% | 0.002% |
| 230 | 13.694 | 13.687 | 13.712 | VV | 308 | 3100 | 0.04% | 0.002% |
| 231 | 13.726 | 13.712 | 13.745 | VV | 378 | 4318 | 0.06% | 0.003% |
| 232 | 13.749 | 13.745 | 13.761 | VV | 204 | 1748 | 0.02% | 0.001% |
| 233 | 13.775 | 13.761 | 13.785 | VV | 387 | 4412 | 0.06% | 0.003% |
| 234 | 13.789 | 13.785 | 13.795 | VV | 327 | 1694 | 0.02% | 0.001% |
| 235 | 13.804 | 13.795 | 13.814 | VV | 393 | 3416 | 0.04% | 0.002% |
| 236 | 13.818 | 13.814 | 13.824 | VV | 495 | 1829 | 0.02% | 0.001% |
| 237 | 13.839 | 13.824 | 13.844 | VV | 389 | 3637 | 0.05% | 0.002% |
| 238 | 13.867 | 13.844 | 13.894 | VV | 1597 | 25503 | 0.33% | 0.016% |
| 239 | 13.899 | 13.894 | 13.907 | VV | 618 | 3499 | 0.04% | 0.002% |
| 240 | 13.917 | 13.907 | 13.945 | VV | 563 | 9479 | 0.12% | 0.006% |
| 241 | 13.954 | 13.945 | 13.970 | VV | 620 | 6747 | 0.09% | 0.004% |
| 242 | 13.975 | 13.970 | 14.007 | VV | 502 | 8795 | 0.11% | 0.005% |
| 243 | 14.012 | 14.007 | 14.020 | VV | 461 | 2318 | 0.03% | 0.001% |
| 244 | 14.028 | 14.020 | 14.038 | VV | 378 | 3298 | 0.04% | 0.002% |
| 245 | 14.047 | 14.038 | 14.057 | VV | 370 | 4030 | 0.05% | 0.002% |
| 246 | 14.077 | 14.057 | 14.087 | VV | 570 | 8051 | 0.10% | 0.005% |

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|---|---|---|---|---|---|---|---|---|
| 247 | 14.092 | 14.087 | 14.116 | VV | 456 | 6240 | 0.08% | 0.004% |
| 248 | 14.130 | 14.116 | 14.135 | VV | 567 | 4845 | 0.06% | 0.003% |
| 249 | 14.168 | 14.135 | 14.174 | VV | 600 | 11502 | 0.15% | 0.007% |
| 250 | 14.187 | 14.174 | 14.192 | VV | 542 | 4943 | 0.06% | 0.003% |
| 251 | 14.198 | 14.192 | 14.205 | VV | 533 | 3776 | 0.05% | 0.002% |
| 252 | 14.209 | 14.205 | 14.221 | VV | 582 | 4130 | 0.05% | 0.003% |
| 253 | 14.239 | 14.221 | 14.275 | VV | 674 | 14726 | 0.19% | 0.009% |
| 254 | 14.283 | 14.275 | 14.297 | VV | 489 | 5250 | 0.07% | 0.003% |
| 255 | 14.317 | 14.297 | 14.321 | VV | 621 | 7076 | 0.09% | 0.004% |
| 256 | 14.333 | 14.321 | 14.360 | VV | 808 | 11967 | 0.15% | 0.007% |
| 257 | 14.374 | 14.360 | 14.389 | VV | 560 | 6590 | 0.08% | 0.004% |
| 258 | 14.394 | 14.389 | 14.398 | VV | 372 | 1952 | 0.02% | 0.001% |
| 259 | 14.434 | 14.398 | 14.453 | VV | 561190 | 6467172 | 82.70% | 3.994% |
| 260 | 14.476 | 14.453 | 14.506 | VV | 511087 | 6375501 | 81.53% | 3.937% |
| 261 | 14.526 | 14.506 | 14.670 | VV | 75340 | 1401845 | 17.93% | 0.866% |
| 262 | 14.692 | 14.670 | 14.746 | VV | 1802 | 58362 | 0.75% | 0.036% |
| 263 | 14.750 | 14.746 | 14.756 | VV | 988 | 5353 | 0.07% | 0.003% |
| 264 | 14.760 | 14.756 | 14.793 | VV | 940 | 15847 | 0.20% | 0.010% |
| 265 | 14.801 | 14.793 | 14.803 | VV | 654 | 3868 | 0.05% | 0.002% |
| 266 | 14.808 | 14.803 | 14.819 | VV | 689 | 5791 | 0.07% | 0.004% |
| 267 | 14.840 | 14.819 | 14.865 | VV | 1108 | 20390 | 0.26% | 0.013% |
| 268 | 14.889 | 14.865 | 14.937 | VV | 1693 | 41379 | 0.53% | 0.026% |
| 269 | 14.943 | 14.937 | 14.951 | VV | 641 | 4752 | 0.06% | 0.003% |
| 270 | 14.955 | 14.951 | 14.985 | VV | 633 | 10324 | 0.13% | 0.006% |
| 271 | 14.999 | 14.985 | 15.010 | VV | 654 | 7030 | 0.09% | 0.004% |
| 272 | 15.017 | 15.010 | 15.029 | VV | 631 | 6353 | 0.08% | 0.004% |
| 273 | 15.061 | 15.029 | 15.118 | VV | 1814 | 41263 | 0.53% | 0.025% |
| 274 | 15.137 | 15.118 | 15.142 | VV | 477 | 5369 | 0.07% | 0.003% |
| 275 | 15.168 | 15.142 | 15.182 | VV | 567 | 10140 | 0.13% | 0.006% |
| 276 | 15.191 | 15.182 | 15.219 | VV | 581 | 9687 | 0.12% | 0.006% |
| 277 | 15.242 | 15.219 | 15.294 | VV | 1038 | 23464 | 0.30% | 0.014% |
| 278 | 15.300 | 15.294 | 15.307 | VV | 430 | 2545 | 0.03% | 0.002% |
| 279 | 15.317 | 15.307 | 15.331 | VV | 522 | 6084 | 0.08% | 0.004% |
| 280 | 15.350 | 15.331 | 15.357 | VV | 652 | 8229 | 0.11% | 0.005% |
| 281 | 15.362 | 15.357 | 15.387 | VV | 618 | 10168 | 0.13% | 0.006% |
| 282 | 15.405 | 15.387 | 15.417 | VV | 638 | 9102 | 0.12% | 0.006% |
| 283 | 15.423 | 15.417 | 15.432 | VV | 511 | 3958 | 0.05% | 0.002% |
| 284 | 15.439 | 15.432 | 15.466 | VV | 460 | 7377 | 0.09% | 0.005% |
| 285 | 15.470 | 15.466 | 15.480 | VV | 312 | 2416 | 0.03% | 0.001% |
| 286 | 15.542 | 15.480 | 15.572 | VV | 58268 | 770265 | 9.85% | 0.476% |
| 287 | 15.584 | 15.572 | 15.614 | VV | 695 | 12545 | 0.16% | 0.008% |
| 288 | 15.625 | 15.614 | 15.640 | VV | 326 | 3934 | 0.05% | 0.002% |
| 289 | 15.646 | 15.640 | 15.649 | VV | 307 | 1307 | 0.02% | 0.001% |
| 290 | 15.655 | 15.649 | 15.672 | VV | 389 | 3612 | 0.05% | 0.002% |
| 291 | 15.696 | 15.672 | 15.700 | VV | 540 | 5070 | 0.06% | 0.003% |
| 292 | 15.707 | 15.700 | 15.718 | VV | 568 | 4618 | 0.06% | 0.003% |
| 293 | 15.727 | 15.718 | 15.745 | VV | 441 | 5523 | 0.07% | 0.003% |
| 294 | 15.757 | 15.745 | 15.776 | VV | 372 | 4015 | 0.05% | 0.002% |
| 295 | 15.787 | 15.776 | 15.803 | VV | 325 | 2176 | 0.03% | 0.001% |
| 296 | 15.819 | 15.803 | 15.832 | PV | 251 | 2534 | 0.03% | 0.002% |
| 297 | 15.848 | 15.840 | 15.881 | VV | 233 | 4633 | 0.06% | 0.003% |
| 298 | 15.889 | 15.881 | 15.903 | VV | 278 | 2511 | 0.03% | 0.002% |
| 299 | 15.909 | 15.903 | 15.914 | VV | 281 | 1410 | 0.02% | 0.001% |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 300 | 15.925 | 15.922 | 15.934 | VV | 355 | 1896 | 0.02% | 0.001% |
| 301 | 15.938 | 15.934 | 15.949 | VV | 324 | 2084 | 0.03% | 0.001% |
| 302 | 15.984 | 15.949 | 15.998 | VV | 520042 | 6451976 | 82.51% | 3.984% |
| 303 | 16.016 | 15.998 | 16.084 | VV | 544227 | 6674313 | 85.35% | 4.122% |
| 304 | 16.099 | 16.084 | 16.161 | VV | 6490 | 152782 | 1.95% | 0.094% |
| 305 | 16.167 | 16.161 | 16.173 | VV | 1283 | 8269 | 0.11% | 0.005% |
| 306 | 16.184 | 16.173 | 16.190 | VV | 1293 | 12719 | 0.16% | 0.008% |
| 307 | 16.198 | 16.190 | 16.210 | VV | 1435 | 15860 | 0.20% | 0.010% |
| 308 | 16.213 | 16.210 | 16.242 | VV | 1338 | 22741 | 0.29% | 0.014% |
| 309 | 16.266 | 16.242 | 16.300 | VV | 2295 | 47336 | 0.61% | 0.029% |
| 310 | 16.304 | 16.300 | 16.318 | VV | 859 | 8540 | 0.11% | 0.005% |
| 311 | 16.358 | 16.318 | 16.457 | VV | 432654 | 6279718 | 80.30% | 3.878% |
| 312 | 16.485 | 16.457 | 16.566 | VV | 59598 | 915486 | 11.71% | 0.565% |
| 313 | 16.575 | 16.566 | 16.668 | VV | 1409 | 51220 | 0.66% | 0.032% |
| 314 | 16.677 | 16.668 | 16.697 | VV | 613 | 7707 | 0.10% | 0.005% |
| 315 | 16.719 | 16.697 | 16.730 | VV | 419 | 6955 | 0.09% | 0.004% |
| 316 | 16.735 | 16.730 | 16.767 | VV | 417 | 7238 | 0.09% | 0.004% |
| 317 | 16.771 | 16.767 | 16.775 | VV | 301 | 1420 | 0.02% | 0.001% |
| 318 | 16.787 | 16.775 | 16.804 | VV | 462 | 6403 | 0.08% | 0.004% |
| 319 | 16.815 | 16.804 | 16.822 | VV | 433 | 4166 | 0.05% | 0.003% |
| 320 | 16.826 | 16.822 | 16.834 | VV | 486 | 2832 | 0.04% | 0.002% |
| 321 | 16.838 | 16.834 | 16.853 | VV | 382 | 3805 | 0.05% | 0.002% |
| 322 | 16.859 | 16.853 | 16.879 | VV | 474 | 4739 | 0.06% | 0.003% |
| 323 | 16.900 | 16.879 | 16.909 | VV | 537 | 6290 | 0.08% | 0.004% |
| 324 | 16.933 | 16.909 | 16.964 | VV | 1604 | 26031 | 0.33% | 0.016% |
| 325 | 16.968 | 16.964 | 16.990 | VV | 385 | 4080 | 0.05% | 0.003% |
| 326 | 16.997 | 16.990 | 17.001 | VV | 316 | 1949 | 0.02% | 0.001% |
| 327 | 17.006 | 17.001 | 17.016 | VV | 360 | 2747 | 0.04% | 0.002% |
| 328 | 17.022 | 17.016 | 17.039 | VV | 422 | 4802 | 0.06% | 0.003% |
| 329 | 17.059 | 17.039 | 17.079 | VV | 472 | 9124 | 0.12% | 0.006% |
| 330 | 17.090 | 17.079 | 17.126 | VV | 424 | 9499 | 0.12% | 0.006% |
| 331 | 17.132 | 17.126 | 17.140 | VV | 415 | 2639 | 0.03% | 0.002% |
| 332 | 17.159 | 17.140 | 17.174 | VV | 567 | 8050 | 0.10% | 0.005% |
| 333 | 17.176 | 17.174 | 17.185 | VV | 551 | 2897 | 0.04% | 0.002% |
| 334 | 17.192 | 17.185 | 17.200 | VV | 499 | 3507 | 0.04% | 0.002% |
| 335 | 17.222 | 17.200 | 17.239 | VV | 717 | 13546 | 0.17% | 0.008% |
| 336 | 17.262 | 17.239 | 17.295 | VV | 989 | 24263 | 0.31% | 0.015% |
| 337 | 17.305 | 17.295 | 17.310 | VV | 588 | 4410 | 0.06% | 0.003% |
| 338 | 17.369 | 17.310 | 17.415 | VV | 55098 | 747560 | 9.56% | 0.462% |
| 339 | 17.422 | 17.415 | 17.434 | VV | 451 | 4381 | 0.06% | 0.003% |
| 340 | 17.442 | 17.434 | 17.457 | VV | 567 | 6869 | 0.09% | 0.004% |
| 341 | 17.461 | 17.457 | 17.466 | VV | 594 | 2573 | 0.03% | 0.002% |
| 342 | 17.472 | 17.466 | 17.478 | VV | 553 | 3454 | 0.04% | 0.002% |
| 343 | 17.484 | 17.478 | 17.492 | VV | 541 | 3873 | 0.05% | 0.002% |
| 344 | 17.497 | 17.492 | 17.503 | VV | 466 | 2721 | 0.03% | 0.002% |
| 345 | 17.518 | 17.503 | 17.534 | VV | 559 | 8168 | 0.10% | 0.005% |
| 346 | 17.549 | 17.534 | 17.602 | VV | 525 | 14848 | 0.19% | 0.009% |
| 347 | 17.605 | 17.602 | 17.617 | VV | 367 | 2715 | 0.03% | 0.002% |
| 348 | 17.638 | 17.617 | 17.654 | VV | 485 | 7850 | 0.10% | 0.005% |
| 349 | 17.664 | 17.654 | 17.677 | VV | 547 | 6513 | 0.08% | 0.004% |
| 350 | 17.728 | 17.677 | 17.742 | VV | 463666 | 5748580 | 73.51% | 3.550% |
| 351 | 17.762 | 17.742 | 17.942 | VV | 362835 | 6638413 | 84.89% | 4.099% |

rteres

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 352 | 17.977 | 17.942 | 18.155 | VV | 413843 | 6574820 | 84.08% | 4.060% |
| 353 | 18.196 | 18.155 | 18.240 | VV | 52675 | 820429 | 10.49% | 0.507% |
| 354 | 18.241 | 18.240 | 18.247 | VV | 2462 | 10151 | 0.13% | 0.006% |
| 355 | 18.252 | 18.247 | 18.262 | VV | 2476 | 19884 | 0.25% | 0.012% |
| 356 | 18.267 | 18.262 | 18.281 | VV | 2164 | 23654 | 0.30% | 0.015% |
| 357 | 18.289 | 18.281 | 18.300 | VBA | 2139 | 24849 | 0.32% | 0.015% |

Sum of corrected areas: 161938269

Aromatic EPH 021125.M Fri Feb 28 02:08:40 2025

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# Manual Integration Report

| Sequence: | FC021125AL | Instrument | FID_c |
|---|---|---|---|

| Sample ID | File ID | Parameter | Review By | Review On | Supervised By | Supervised On | Reason |
|---|---|---|---|---|---|---|---|

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# Manual Integration Report

| Sequence: | FC022725AL | Instrument | FID_c |
|---|---|---|---|

| Sample ID | File ID | Parameter | Review By | Review On | Supervised By | Supervised On | Reason |
|---|---|---|---|---|---|---|---|
| Q1421-05 | FC068312.D | n-Dotriacontane (C32) | yogesh | 3/5/2025 7:49:22 AM | Ankita | 3/5/2025 9:16:34 | Peak Integrated by Software |
| Q1421-05 | FC068312.D | n-Tricontane (C30) | yogesh | 3/5/2025 7:49:22 AM | Ankita | 3/5/2025 9:16:34 | Peak Integrated by Software |
| Q1421-06 | FC068313.D | n-Dotriacontane (C32) | yogesh | 3/5/2025 7:49:23 AM | Ankita | 3/5/2025 9:16:42 | Peak Integrated by Software |
| Q1421-06 | FC068313.D | n-Tricontane (C30) | yogesh | 3/5/2025 7:49:23 AM | Ankita | 3/5/2025 9:16:42 | Peak Integrated by Software |

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# Manual Integration Report

| Sequence: | FC022825AL | Instrument | FID_c |
|---|---|---|---|

| Sample ID | File ID | Parameter | Review By | Review On | Supervised By | Supervised On | Reason |
|---|---|---|---|---|---|---|---|
| Q1447-01 | FC068339.D | 1-chlorooctadecane (SURR) | yogesh | 3/5/2025 7:49:39 AM | Ankita | 3/5/2025 9:17:04 | Peak Integrated by Software |

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# Manual Integration Report

| Sequence: | FD021125AR | Instrument | FID_d |
|---|---|---|---|

| Sample ID | File ID | Parameter | Review By | Review On | Supervised By | Supervised On | Reason |
|---|---|---|---|---|---|---|---|
| 20 PPM AROMATIC HC | FD049077.D | Indeno[1,2,3-cd]pyrene (C35.01) | yogesh | 2/11/2025 7:39:10 AM | Ankita | 2/11/2025 9:13:40 | Peak Integrated by Software |
| 20 PPM AROMATIC HC | FD049079.D | Indeno[1,2,3-cd]pyrene (C35.01) | yogesh | 2/11/2025 7:39:12 AM | Ankita | 2/11/2025 9:13:41 | Peak Integrated by Software |

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# Manual Integration Report

| Sequence: | FD022725AR | Instrument | FID_d |
|---|---|---|---|

| Sample ID | File ID | Parameter | Review By | Review On | Supervised By | Supervised On | Reason |
|---|---|---|---|---|---|---|---|
| PB166883BS | FD049116.D | Bnezo[k]fluoranthene (C30.14) | yogesh | 2/28/2025 8:31:10 AM | Ankita | 2/28/2025 10:37:57 | Peak Integrated by Software |
| 20 PPM AROMATIC HC | FD049126.D | Anthracene (C19.43) | yogesh | 2/28/2025 8:31:12 AM | Ankita | 2/28/2025 10:37:59 | Peak Integrated by Software |

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# Manual Integration Report

| Sequence: | FD022825AR | Instrument | FID_d |
|---|---|---|---|

| Sample ID | File ID | Parameter | Review By | Review On | Supervised By | Supervised On | Reason |
|---|---|---|---|---|---|---|---|
| 20 PPM AROMATIC HC | FD049129.D | Indeno[1,2,3-cd]pyrene (C35.01) | yogesh | 3/3/2025 8:01:30 AM | Ankita | 3/4/2025 12:54:35 | Peak Integrated by Software |
| Q1421-01D | FD049141.D | 2-Flurobiphenyl (SURR) | yogesh | 3/3/2025 8:01:31 AM | Ankita | 3/4/2025 12:54:36 | Peak Integrated by Software |

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**Instrument ID: FID_C**

## Daily Analysis Runlog For Sequence/QCBatch ID # FC021125AL

| | | | | | |
|---|---|---|---|---|---|
| Review By | yogesh | Review On | 2/10/2025 4:11:01 PM | | |
| Supervise By | Ankita | Supervise On | 2/11/2025 9:13:33 AM | | |
| SubDirectory | FC021125AL | HP Acquire Method | | HP Processing Method | FC021125AL |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | |
| Initial Calibration Stds | PP24170,PP24175,PP24176,PP24177,PP24178 |
| CCC | PP24176 |
| Internal Standard/PEM | |
| ICV/I.BLK | PP24174,PP24179 |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| Sr# | SampleId | Data File Name | Date-Time | Operator | Status |
|---|---|---|---|---|---|
| 1 | MECL2 | FC068250.D | 10 Feb 2025 15:12 | YP/AJ | Ok |
| 2 | I.BLK | FC068251.D | 10 Feb 2025 15:48 | YP/AJ | Ok |
| 3 | 100 PPM ALIPHATIC HC STD1 | FC068252.D | 10 Feb 2025 16:24 | YP/AJ | Ok |
| 4 | 50 PPM ALIPHATIC HC STD2 | FC068253.D | 10 Feb 2025 17:01 | YP/AJ | Ok |
| 5 | 20 PPM ALIPHATIC HC STD3 | FC068254.D | 10 Feb 2025 17:38 | YP/AJ | Ok |
| 6 | 10 PPM ALIPHATIC HC STD4 | FC068255.D | 10 Feb 2025 18:14 | YP/AJ | Ok |
| 7 | 5 PPM ALIPHATIC HC STD5 | FC068256.D | 10 Feb 2025 18:50 | YP/AJ | Ok |
| 8 | 20 PPM ALIPHATIC HC STD ICV | FC068257.D | 10 Feb 2025 19:26 | YP/AJ | Ok |
| 9 | I.BLK | FC068258.D | 10 Feb 2025 20:39 | YP/AJ | Ok |
| 10 | 20 PPM ALIPHATIC HC STD | FC068259.D | 10 Feb 2025 21:16 | YP/AJ | Ok |

M : Manual Integration

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**Instrument ID: FID_C**

## Daily Analysis Runlog For Sequence/QCBatch ID # FC022725AL

| | | | | | |
|---|---|---|---|---|---|
| Review By | yogesh | Review On | 2/27/2025 10:00:10 AM | | |
| Supervise By | Ankita | Supervise On | 2/28/2025 10:37:26 AM | | |
| SubDirectory | FC022725AL | HP Acquire Method | | HP Processing Method | FC021125AL |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | |
| Initial Calibration Stds | PP24170,PP24175,PP24176,PP24177,PP24178 |
| CCC | PP24176 |
| Internal Standard/PEM | |
| ICV/I.BLK | PP24174,PP24179 |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| Sr# | SampleId | Data File Name | Date-Time | Operator | Status |
|---|---|---|---|---|---|
| 1 | MECL2 | FC068303.D | 27 Feb 2025 06:46 | YP/AJ | Ok |
| 2 | I.BLK | FC068304.D | 27 Feb 2025 07:22 | YP/AJ | Ok |
| 3 | 20 PPM ALIPHATIC HC STD | FC068305.D | 27 Feb 2025 08:35 | YP/AJ | Ok |
| 4 | PB166883BL | FC068306.D | 27 Feb 2025 10:26 | YP/AJ | Ok |
| 5 | PB166883BS | FC068307.D | 27 Feb 2025 11:02 | YP/AJ | Ok |
| 6 | PB166883TB | FC068308.D | 27 Feb 2025 11:38 | YP/AJ | Ok |
| 7 | Q1421-04 | FC068309.D | 27 Feb 2025 12:14 | YP/AJ | Ok |
| 8 | I.BLK | FC068310.D | 27 Feb 2025 12:50 | YP/AJ | Ok |
| 9 | 20 PPM ALIPHATIC HC STD | FC068311.D | 27 Feb 2025 13:27 | YP/AJ | Ok |
| 10 | Q1421-05 | FC068312.D | 27 Feb 2025 14:03 | YP/AJ | Ok,M |
| 11 | Q1421-06 | FC068313.D | 27 Feb 2025 14:40 | YP/AJ | Ok,M |
| 12 | Q1421-08 | FC068314.D | 27 Feb 2025 15:17 | YP/AJ | Ok |
| 13 | Q1421-10 | FC068315.D | 27 Feb 2025 15:53 | YP/AJ | Ok |
| 14 | PP24210 | FC068316.D | 27 Feb 2025 16:31 | YP/AJ | Ok |
| 15 | I.BLK | FC068317.D | 27 Feb 2025 17:08 | YP/AJ | Ok |
| 16 | 20 PPM ALIPHATIC HC STD | FC068318.D | 27 Feb 2025 17:45 | YP/AJ | Ok |

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**Instrument ID: FID_C**

## Daily Analysis Runlog For Sequence/QCBatch ID # FC022825AL

| | | | | | |
|---|---|---|---|---|---|
| Review By | yogesh | Review On | 2/28/2025 11:41:16 AM | | |
| Supervise By | Ankita | Supervise On | 3/4/2025 12:54:27 PM | | |
| SubDirectory | FC022825AL | HP Acquire Method | | HP Processing Method | FC021125AL |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | |
| Initial Calibration Stds | PP24170,PP24175,PP24176,PP24177,PP24178 |
| CCC | PP24176 |
| Internal Standard/PEM | |
| ICV/I.BLK | PP24174,PP24179 |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| Sr# | SampleId | Data File Name | Date-Time | Operator | Status |
|---|---|---|---|---|---|
| 1 | MECL2 | FC068319.D | 28 Feb 2025 09:10 | YP/AJ | Ok |
| 2 | I.BLK | FC068320.D | 28 Feb 2025 09:46 | YP/AJ | Ok |
| 3 | 20 PPM ALIPHATIC HC STD | FC068321.D | 28 Feb 2025 10:23 | YP/AJ | Ok |
| 4 | PB166923BL | FC068322.D | 28 Feb 2025 11:00 | YP/AJ | Ok |
| 5 | PB166923BS | FC068323.D | 28 Feb 2025 11:37 | YP/AJ | Ok |
| 6 | PB166923BSD | FC068324.D | 28 Feb 2025 12:13 | YP/AJ | Ok |
| 7 | Q1415-01 | FC068325.D | 28 Feb 2025 12:50 | YP/AJ | Ok |
| 8 | Q1415-02 | FC068326.D | 28 Feb 2025 13:26 | YP/AJ | Ok |
| 9 | Q1415-03 | FC068327.D | 28 Feb 2025 14:03 | YP/AJ | Ok |
| 10 | Q1415-04 | FC068328.D | 28 Feb 2025 14:40 | YP/AJ | Ok |
| 11 | Q1421-07 | FC068329.D | 28 Feb 2025 15:16 | YP/AJ | Ok |
| 12 | I.BLK | FC068330.D | 28 Feb 2025 15:53 | YP/AJ | Ok |
| 13 | 20 PPM ALIPHATIC HC STD | FC068331.D | 28 Feb 2025 16:30 | YP/AJ | Ok |
| 14 | Q1421-01 | FC068332.D | 28 Feb 2025 17:44 | YP/AJ | Ok |
| 15 | Q1421-01D | FC068333.D | 28 Feb 2025 18:20 | YP/AJ | Ok |
| 16 | Q1421-02 | FC068334.D | 28 Feb 2025 18:56 | YP/AJ | Ok |
| 17 | Q1421-03 | FC068335.D | 28 Feb 2025 19:32 | YP/AJ | Ok |
| 18 | Q1421-09 | FC068336.D | 28 Feb 2025 20:09 | YP/AJ | Ok |
| 19 | Q1422-01 | FC068337.D | 28 Feb 2025 20:46 | YP/AJ | Ok |
| 20 | Q1422-02 | FC068338.D | 28 Feb 2025 21:22 | YP/AJ | Ok |
| 21 | Q1447-01 | FC068339.D | 28 Feb 2025 21:59 | YP/AJ | Dilution |

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**Instrument ID: FID_C**

## Daily Analysis Runlog For Sequence/QCBatch ID # FC022825AL

| | | | | | |
|---|---|---|---|---|---|
| Review By | yogesh | Review On | 2/28/2025 11:41:16 AM | | |
| Supervise By | Ankita | Supervise On | 3/4/2025 12:54:27 PM | | |
| SubDirectory | FC022825AL | HP Acquire Method | | HP Processing Method | FC021125AL |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | |
| Initial Calibration Stds | PP24170,PP24175,PP24176,PP24177,PP24178 |
| CCC | PP24176 |
| Internal Standard/PEM | |
| ICV/I.BLK | PP24174,PP24179 |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| | | | | | |
|---|---|---|---|---|---|
| 22 | I.BLK | FC068340.D | 28 Feb 2025 23:13 | YP/AJ | Ok |
| 23 | 20 PPM ALIPHATIC HC STD | FC068341.D | 28 Feb 2025 23:50 | YP/AJ | Ok |

M : Manual Integration

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**Instrument ID: FID_D**

## Daily Analysis Runlog For Sequence/QCBatch ID # FD021125AR

| | | | | | |
|---|---|---|---|---|---|
| Review By | yogesh | Review On | 2/10/2025 4:12:05 PM | | |
| Supervise By | Ankita | Supervise On | 2/11/2025 9:13:44 AM | | |
| SubDirectory | FD021125AR | HP Acquire Method | | HP Processing Method | FD021125AR |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | |
| Initial Calibration Stds | PP23968,PP23970,PP23971,PP23972,PP23973 |
| CCC | PP23971 |
| Internal Standard/PEM | |
| ICV/I.BLK | PP23969,PP23974 |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| Sr# | SampleId | Data File Name | Date-Time | Operator | Status |
|---|---|---|---|---|---|
| 1 | MECL2 | FD049070.D | 10 Feb 2025 12:09 | YP/AJ | Ok |
| 2 | I.BLK | FD049071.D | 10 Feb 2025 12:45 | YP/AJ | Ok |
| 3 | 100 PPM AROMATIC HC STD1 | FD049072.D | 10 Feb 2025 13:22 | YP/AJ | Ok |
| 4 | 50 PPM AROMATIC HC STD2 | FD049073.D | 10 Feb 2025 13:58 | YP/AJ | Ok |
| 5 | 20 PPM AROMATIC HC STD3 | FD049074.D | 10 Feb 2025 14:35 | YP/AJ | Ok |
| 6 | 10 PPM AROMATIC HC STD4 | FD049075.D | 10 Feb 2025 15:12 | YP/AJ | Ok |
| 7 | 5 PPM AROMATIC HC STD5 | FD049076.D | 10 Feb 2025 15:48 | YP/AJ | Ok |
| 8 | 20 PPM AROMATIC HC STD ICV | FD049077.D | 10 Feb 2025 16:24 | YP/AJ | Ok,M |
| 9 | I.BLK | FD049078.D | 10 Feb 2025 17:01 | YP/AJ | Ok |
| 10 | 20 PPM AROMATIC HC STD | FD049079.D | 10 Feb 2025 17:38 | YP/AJ | Ok,M |

M : Manual Integration

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**Instrument ID: FID_D**

## Daily Analysis Runlog For Sequence/QCBatch ID # FD022725AR

| | | | | | |
|---|---|---|---|---|---|
| Review By | yogesh | Review On | 2/27/2025 10:01:07 AM | | |
| Supervise By | Ankita | Supervise On | 2/28/2025 10:38:03 AM | | |
| SubDirectory | FD022725AR | HP Acquire Method | | HP Processing Method | FD021125AR |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | |
| Initial Calibration Stds | PP23968,PP23970,PP23971,PP23972,PP23973 |
| CCC | PP23971 |
| Internal Standard/PEM | |
| ICV/I.BLK | PP23969,PP24199 |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| Sr# | SampleId | Data File Name | Date-Time | Operator | Status |
|---|---|---|---|---|---|
| 1 | MECL2 | FD049112.D | 27 Feb 2025 06:46 | YP/AJ | Ok |
| 2 | I.BLK | FD049113.D | 27 Feb 2025 07:22 | YP/AJ | Ok |
| 3 | 20 PPM AROMATIC HC STD | FD049114.D | 27 Feb 2025 08:35 | YP/AJ | Ok |
| 4 | PB166883BL | FD049115.D | 27 Feb 2025 10:26 | YP/AJ | Ok |
| 5 | PB166883BS | FD049116.D | 27 Feb 2025 11:02 | YP/AJ | Ok,M |
| 6 | PB166883TB | FD049117.D | 27 Feb 2025 11:38 | YP/AJ | Ok |
| 7 | Q1421-04 | FD049118.D | 27 Feb 2025 12:14 | YP/AJ | Ok |
| 8 | I.BLK | FD049119.D | 27 Feb 2025 12:50 | YP/AJ | Ok |
| 9 | 20 PPM AROMATIC HC STD | FD049120.D | 27 Feb 2025 13:27 | YP/AJ | Ok |
| 10 | Q1421-05 | FD049121.D | 27 Feb 2025 14:03 | YP/AJ | Ok |
| 11 | Q1421-06 | FD049122.D | 27 Feb 2025 14:40 | YP/AJ | Ok |
| 12 | Q1421-08 | FD049123.D | 27 Feb 2025 15:17 | YP/AJ | Ok |
| 13 | Q1421-10 | FD049124.D | 27 Feb 2025 15:53 | YP/AJ | Ok |
| 14 | I.BLK | FD049125.D | 27 Feb 2025 17:08 | YP/AJ | Ok |
| 15 | 20 PPM AROMATIC HC STD | FD049126.D | 27 Feb 2025 17:45 | YP/AJ | Ok,M |

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**Instrument ID: FID_D**

## Daily Analysis Runlog For Sequence/QCBatch ID # FD022825AR

| | | | | | |
|---|---|---|---|---|---|
| Review By | yogesh | Review On | 2/28/2025 11:42:15 AM | | |
| Supervise By | Ankita | Supervise On | 3/4/2025 12:54:39 PM | | |
| SubDirectory | FD022825AR | HP Acquire Method | | HP Processing Method | FD021125AR |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | |
| Initial Calibration Stds | PP23968,PP23970,PP23971,PP23972,PP23973 |
| CCC | PP23971 |
| Internal Standard/PEM | |
| ICV/I.BLK | PP23969,PP24199 |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| Sr# | SampleId | Data File Name | Date-Time | Operator | Status |
|---|---|---|---|---|---|
| 1 | MECL2 | FD049127.D | 28 Feb 2025 09:10 | YP/AJ | Ok |
| 2 | I.BLK | FD049128.D | 28 Feb 2025 09:46 | YP/AJ | Ok |
| 3 | 20 PPM AROMATIC HC STD | FD049129.D | 28 Feb 2025 10:23 | YP/AJ | Ok,M |
| 4 | PB166923BL | FD049130.D | 28 Feb 2025 11:00 | YP/AJ | Ok |
| 5 | PB166923BS | FD049131.D | 28 Feb 2025 11:37 | YP/AJ | Ok |
| 6 | PB166923BSD | FD049132.D | 28 Feb 2025 12:13 | YP/AJ | Ok |
| 7 | Q1415-01 | FD049133.D | 28 Feb 2025 12:50 | YP/AJ | Ok |
| 8 | Q1415-02 | FD049134.D | 28 Feb 2025 13:26 | YP/AJ | Ok |
| 9 | Q1415-03 | FD049135.D | 28 Feb 2025 14:03 | YP/AJ | Ok |
| 10 | Q1415-04 | FD049136.D | 28 Feb 2025 14:40 | YP/AJ | Ok |
| 11 | Q1421-07 | FD049137.D | 28 Feb 2025 15:16 | YP/AJ | Ok |
| 12 | I.BLK | FD049138.D | 28 Feb 2025 15:53 | YP/AJ | Ok |
| 13 | 20 PPM AROMATIC HC STD | FD049139.D | 28 Feb 2025 16:30 | YP/AJ | Ok |
| 14 | Q1421-01 | FD049140.D | 28 Feb 2025 17:44 | YP/AJ | Ok |
| 15 | Q1421-01D | FD049141.D | 28 Feb 2025 18:20 | YP/AJ | Ok,M |
| 16 | Q1421-02 | FD049142.D | 28 Feb 2025 18:56 | YP/AJ | Ok |
| 17 | Q1421-03 | FD049143.D | 28 Feb 2025 19:32 | YP/AJ | Ok |
| 18 | Q1421-09 | FD049144.D | 28 Feb 2025 20:09 | YP/AJ | Ok |
| 19 | Q1422-01 | FD049145.D | 28 Feb 2025 20:46 | YP/AJ | Ok |
| 20 | Q1422-02 | FD049146.D | 28 Feb 2025 21:22 | YP/AJ | Ok |
| 21 | Q1447-01 | FD049147.D | 28 Feb 2025 21:59 | YP/AJ | Dilution |

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**Instrument ID: FID_D**

## Daily Analysis Runlog For Sequence/QCBatch ID # FD022825AR

| | | | | | |
|---|---|---|---|---|---|
| Review By | yogesh | Review On | 2/28/2025 11:42:15 AM | | |
| Supervise By | Ankita | Supervise On | 3/4/2025 12:54:39 PM | | |
| SubDirectory | FD022825AR | HP Acquire Method | | HP Processing Method | FD021125AR |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | |
| Initial Calibration Stds | PP23968,PP23970,PP23971,PP23972,PP23973 |
| CCC | PP23971 |
| Internal Standard/PEM | |
| ICV/I.BLK | PP23969,PP24199 |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| | | | | | |
|---|---|---|---|---|---|
| 22 | I.BLK | FD049148.D | 28 Feb 2025 23:13 | YP/AJ | Ok |
| 23 | 20 PPM AROMATIC HC STD | FD049149.D | 28 Feb 2025 23:50 | YP/AJ | Ok |

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**Instrument ID:** FID_C

## Daily Analysis Runlog For Sequence/QCBatch ID # FC021125AL

| | | | | | |
|---|---|---|---|---|---|
| Review By | yogesh | Review On | 2/10/2025 4:11:01 PM | | |
| Supervise By | Ankita | Supervise On | 2/11/2025 9:13:33 AM | | |
| SubDirectory | FC021125AL | HP Acquire Method | | HP Processing Method | FC021125AL |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | |
| Initial Calibration Stds | PP24170,PP24175,PP24176,PP24177,PP24178 |
| CCC | PP24176 |
| Internal Standard/PEM | |
| ICV/I.BLK | PP24174,PP24179 |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| Sr# | SampleId | ClientID | Data File Name | Date-Time | Comment | Operator | Status |
|---|---|---|---|---|---|---|---|
| 1 | MECL2 | MECL2 | FC068250.D | 10 Feb 2025 15:12 | | YP/AJ | Ok |
| 2 | I.BLK | I.BLK | FC068251.D | 10 Feb 2025 15:48 | | YP/AJ | Ok |
| 3 | 100 PPM ALIPHATIC H | 100 PPM ALIPHATIC H | FC068252.D | 10 Feb 2025 16:24 | | YP/AJ | Ok |
| 4 | 50 PPM ALIPHATIC HC | 50 PPM ALIPHATIC HC | FC068253.D | 10 Feb 2025 17:01 | | YP/AJ | Ok |
| 5 | 20 PPM ALIPHATIC HC | 20 PPM ALIPHATIC HC | FC068254.D | 10 Feb 2025 17:38 | | YP/AJ | Ok |
| 6 | 10 PPM ALIPHATIC HC | 10 PPM ALIPHATIC HC | FC068255.D | 10 Feb 2025 18:14 | | YP/AJ | Ok |
| 7 | 5 PPM ALIPHATIC HC | 5 PPM ALIPHATIC HC | FC068256.D | 10 Feb 2025 18:50 | | YP/AJ | Ok |
| 8 | 20 PPM ALIPHATIC HC | 20 PPM ALIPHATIC HC | FC068257.D | 10 Feb 2025 19:26 | | YP/AJ | Ok |
| 9 | I.BLK | I.BLK | FC068258.D | 10 Feb 2025 20:39 | | YP/AJ | Ok |
| 10 | 20 PPM ALIPHATIC HC | 20 PPM ALIPHATIC HC | FC068259.D | 10 Feb 2025 21:16 | | YP/AJ | Ok |

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**Instrument ID:** FID_C

## Daily Analysis Runlog For Sequence/QCBatch ID # FC022725AL

| | | | | | |
|---|---|---|---|---|---|
| Review By | yogesh | Review On | 2/27/2025 10:00:10 AM | | |
| Supervise By | Ankita | Supervise On | 2/28/2025 10:37:26 AM | | |
| SubDirectory | FC022725AL | HP Acquire Method | | HP Processing Method | FC021125AL |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | |
| Initial Calibration Stds | PP24170,PP24175,PP24176,PP24177,PP24178 |
| CCC | PP24176 |
| Internal Standard/PEM | |
| ICV/I.BLK | PP24174,PP24179 |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| Sr# | SampleId | ClientID | Data File Name | Date-Time | Comment | Operator | Status |
|---|---|---|---|---|---|---|---|
| 1 | MECL2 | MECL2 | FC068303.D | 27 Feb 2025 06:46 | | YP/AJ | Ok |
| 2 | I.BLK | I.BLK | FC068304.D | 27 Feb 2025 07:22 | | YP/AJ | Ok |
| 3 | 20 PPM ALIPHATIC HC | 20 PPM ALIPHATIC HC | FC068305.D | 27 Feb 2025 08:35 | | YP/AJ | Ok |
| 4 | PB166883BL | PB166883BL | FC068306.D | 27 Feb 2025 10:26 | | YP/AJ | Ok |
| 5 | PB166883BS | PB166883BS | FC068307.D | 27 Feb 2025 11:02 | | YP/AJ | Ok |
| 6 | PB166883TB | PB166883TB | FC068308.D | 27 Feb 2025 11:38 | | YP/AJ | Ok |
| 7 | Q1421-04 | P001-CLAY-CF01-01 | FC068309.D | 27 Feb 2025 12:14 | | YP/AJ | Ok |
| 8 | I.BLK | I.BLK | FC068310.D | 27 Feb 2025 12:50 | | YP/AJ | Ok |
| 9 | 20 PPM ALIPHATIC HC | 20 PPM ALIPHATIC HC | FC068311.D | 27 Feb 2025 13:27 | | YP/AJ | Ok |
| 10 | Q1421-05 | P001-CLAY-CF01-01MS | FC068312.D | 27 Feb 2025 14:03 | FC068309.D | YP/AJ | Ok,M |
| 11 | Q1421-06 | P001-CLAY-CF01-01MSD | FC068313.D | 27 Feb 2025 14:40 | FC068309.D!FC068312.D | YP/AJ | Ok,M |
| 12 | Q1421-08 | P001-CLAY-CF01-02 | FC068314.D | 27 Feb 2025 15:17 | | YP/AJ | Ok |
| 13 | Q1421-10 | P001-CLAY-CF02-01 | FC068315.D | 27 Feb 2025 15:53 | | YP/AJ | Ok |
| 14 | PP24210 | PP24210 | FC068316.D | 27 Feb 2025 16:31 | | YP/AJ | Ok |
| 15 | I.BLK | I.BLK | FC068317.D | 27 Feb 2025 17:08 | | YP/AJ | Ok |
| 16 | 20 PPM ALIPHATIC HC | 20 PPM ALIPHATIC HC | FC068318.D | 27 Feb 2025 17:45 | | YP/AJ | Ok |

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**Instrument ID:** FID_C

## Daily Analysis Runlog For Sequence/QCBatch ID # FC022825AL

| | | | | | |
|---|---|---|---|---|---|
| Review By | yogesh | Review On | 2/28/2025 11:41:16 AM | | |
| Supervise By | Ankita | Supervise On | 3/4/2025 12:54:27 PM | | |
| SubDirectory | FC022825AL | HP Acquire Method | | HP Processing Method | FC021125AL |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | |
| Initial Calibration Stds | PP24170,PP24175,PP24176,PP24177,PP24178 |
| CCC | PP24176 |
| Internal Standard/PEM | |
| ICV/I.BLK | PP24174,PP24179 |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| Sr# | SampleId | ClientID | Data File Name | Date-Time | Comment | Operator | Status |
|---|---|---|---|---|---|---|---|
| 1 | MECL2 | MECL2 | FC068319.D | 28 Feb 2025 09:10 | | YP/AJ | Ok |
| 2 | I.BLK | I.BLK | FC068320.D | 28 Feb 2025 09:46 | | YP/AJ | Ok |
| 3 | 20 PPM ALIPHATIC HC | 20 PPM ALIPHATIC HC | FC068321.D | 28 Feb 2025 10:23 | | YP/AJ | Ok |
| 4 | PB166923BL | PB166923BL | FC068322.D | 28 Feb 2025 11:00 | | YP/AJ | Ok |
| 5 | PB166923BS | PB166923BS | FC068323.D | 28 Feb 2025 11:37 | | YP/AJ | Ok |
| 6 | PB166923BSD | PB166923BSD | FC068324.D | 28 Feb 2025 12:13 | | YP/AJ | Ok |
| 7 | Q1415-01 | B-163-SB01 | FC068325.D | 28 Feb 2025 12:50 | | YP/AJ | Ok |
| 8 | Q1415-02 | B-172-SB01 | FC068326.D | 28 Feb 2025 13:26 | | YP/AJ | Ok |
| 9 | Q1415-03 | B-163-SB02 | FC068327.D | 28 Feb 2025 14:03 | | YP/AJ | Ok |
| 10 | Q1415-04 | B-172-SB02 | FC068328.D | 28 Feb 2025 14:40 | | YP/AJ | Ok |
| 11 | Q1421-07 | P001-CLAY-CF01-02 | FC068329.D | 28 Feb 2025 15:16 | | YP/AJ | Ok |
| 12 | I.BLK | I.BLK | FC068330.D | 28 Feb 2025 15:53 | | YP/AJ | Ok |
| 13 | 20 PPM ALIPHATIC HC | 20 PPM ALIPHATIC HC | FC068331.D | 28 Feb 2025 16:30 | | YP/AJ | Ok |
| 14 | Q1421-01 | P001-CLAY-CF01-01 | FC068332.D | 28 Feb 2025 17:44 | | YP/AJ | Ok |
| 15 | Q1421-01D | Q1421-01D | FC068333.D | 28 Feb 2025 18:20 | | YP/AJ | Ok |
| 16 | Q1421-02 | P001-CLAY-CF01-01M | FC068334.D | 28 Feb 2025 18:56 | FC068332.D | YP/AJ | Ok |
| 17 | Q1421-03 | P001-CLAY-CF01-01M | FC068335.D | 28 Feb 2025 19:32 | FC068332.D!FC068334.D | YP/AJ | Ok |
| 18 | Q1421-09 | P001-CLAY-CF02-01 | FC068336.D | 28 Feb 2025 20:09 | | YP/AJ | Ok |

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**Instrument ID:** FID_C

## Daily Analysis Runlog For Sequence/QCBatch ID # FC022825AL

| | | | | | |
|---|---|---|---|---|---|
| Review By | yogesh | Review On | 2/28/2025 11:41:16 AM | | |
| Supervise By | Ankita | Supervise On | 3/4/2025 12:54:27 PM | | |
| SubDirectory | FC022825AL | HP Acquire Method | | HP Processing Method | FC021125AL |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | |
| Initial Calibration Stds | PP24170,PP24175,PP24176,PP24177,PP24178 |
| CCC | PP24176 |
| Internal Standard/PEM | |
| ICV/I.BLK | PP24174,PP24179 |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 19 | Q1422-01 | B-154-SB01 | FC068337.D | 28 Feb 2025 20:46 | | YP/AJ | Ok |
| 20 | Q1422-02 | B-154-SB02 | FC068338.D | 28 Feb 2025 21:22 | | YP/AJ | Ok |
| 21 | Q1447-01 | WC1 | FC068339.D | 28 Feb 2025 21:59 | need 10x & 100x dilution | YP/AJ | Dilution |
| 22 | I.BLK | I.BLK | FC068340.D | 28 Feb 2025 23:13 | | YP/AJ | Ok |
| 23 | 20 PPM ALIPHATIC HC | 20 PPM ALIPHATIC HC | FC068341.D | 28 Feb 2025 23:50 | | YP/AJ | Ok |

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**Instrument ID:** FID_D

## Daily Analysis Runlog For Sequence/QCBatch ID # FD021125AR

| | | | | | |
|---|---|---|---|---|---|
| Review By | yogesh | Review On | 2/10/2025 4:12:05 PM | | |
| Supervise By | Ankita | Supervise On | 2/11/2025 9:13:44 AM | | |
| SubDirectory | FD021125AR | HP Acquire Method | | HP Processing Method | FD021125AR |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | |
| Initial Calibration Stds | PP23968,PP23970,PP23971,PP23972,PP23973 |
| CCC | PP23971 |
| Internal Standard/PEM | |
| ICV/I.BLK | PP23969,PP23974 |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| Sr# | SampleId | ClientID | Data File Name | Date-Time | Comment | Operator | Status |
|---|---|---|---|---|---|---|---|
| 1 | MECL2 | MECL2 | FD049070.D | 10 Feb 2025 12:09 | | YP/AJ | Ok |
| 2 | I.BLK | I.BLK | FD049071.D | 10 Feb 2025 12:45 | | YP/AJ | Ok |
| 3 | 100 PPM AROMATIC H | 100 PPM AROMATIC H | FD049072.D | 10 Feb 2025 13:22 | | YP/AJ | Ok |
| 4 | 50 PPM AROMATIC HC | 50 PPM AROMATIC HC | FD049073.D | 10 Feb 2025 13:58 | | YP/AJ | Ok |
| 5 | 20 PPM AROMATIC HC | 20 PPM AROMATIC HC | FD049074.D | 10 Feb 2025 14:35 | | YP/AJ | Ok |
| 6 | 10 PPM AROMATIC HC | 10 PPM AROMATIC HC | FD049075.D | 10 Feb 2025 15:12 | | YP/AJ | Ok |
| 7 | 5 PPM AROMATIC HC | 5 PPM AROMATIC HC | FD049076.D | 10 Feb 2025 15:48 | | YP/AJ | Ok |
| 8 | 20 PPM AROMATIC HC | 20 PPM AROMATIC HC | FD049077.D | 10 Feb 2025 16:24 | | YP/AJ | Ok,M |
| 9 | I.BLK | I.BLK | FD049078.D | 10 Feb 2025 17:01 | | YP/AJ | Ok |
| 10 | 20 PPM AROMATIC HC | 20 PPM AROMATIC HC | FD049079.D | 10 Feb 2025 17:38 | | YP/AJ | Ok,M |

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**Instrument ID:** FID_D

## Daily Analysis Runlog For Sequence/QCBatch ID # FD022725AR

| | | | | | |
|---|---|---|---|---|---|
| Review By | yogesh | Review On | 2/27/2025 10:01:07 AM | | |
| Supervise By | Ankita | Supervise On | 2/28/2025 10:38:03 AM | | |
| SubDirectory | FD022725AR | HP Acquire Method | | HP Processing Method | FD021125AR |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | |
| Initial Calibration Stds | PP23968,PP23970,PP23971,PP23972,PP23973 |
| CCC | PP23971 |
| Internal Standard/PEM | |
| ICV/I.BLK | PP23969,PP24199 |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| Sr# | SampleId | ClientID | Data File Name | Date-Time | Comment | Operator | Status |
|---|---|---|---|---|---|---|---|
| 1 | MECL2 | MECL2 | FD049112.D | 27 Feb 2025 06:46 | | YP/AJ | Ok |
| 2 | I.BLK | I.BLK | FD049113.D | 27 Feb 2025 07:22 | | YP/AJ | Ok |
| 3 | 20 PPM AROMATIC HC | 20 PPM AROMATIC HC | FD049114.D | 27 Feb 2025 08:35 | | YP/AJ | Ok |
| 4 | PB166883BL | PB166883BL | FD049115.D | 27 Feb 2025 10:26 | | YP/AJ | Ok |
| 5 | PB166883BS | PB166883BS | FD049116.D | 27 Feb 2025 11:02 | | YP/AJ | Ok,M |
| 6 | PB166883TB | PB166883TB | FD049117.D | 27 Feb 2025 11:38 | | YP/AJ | Ok |
| 7 | Q1421-04 | P001-CLAY-CF01-01 | FD049118.D | 27 Feb 2025 12:14 | | YP/AJ | Ok |
| 8 | I.BLK | I.BLK | FD049119.D | 27 Feb 2025 12:50 | | YP/AJ | Ok |
| 9 | 20 PPM AROMATIC HC | 20 PPM AROMATIC HC | FD049120.D | 27 Feb 2025 13:27 | | YP/AJ | Ok |
| 10 | Q1421-05 | P001-CLAY-CF01-01MS | FD049121.D | 27 Feb 2025 14:03 | | YP/AJ | Ok |
| 11 | Q1421-06 | P001-CLAY-CF01-01MSD | FD049122.D | 27 Feb 2025 14:40 | | YP/AJ | Ok |
| 12 | Q1421-08 | P001-CLAY-CF01-02 | FD049123.D | 27 Feb 2025 15:17 | | YP/AJ | Ok |
| 13 | Q1421-10 | P001-CLAY-CF02-01 | FD049124.D | 27 Feb 2025 15:53 | | YP/AJ | Ok |
| 14 | I.BLK | I.BLK | FD049125.D | 27 Feb 2025 17:08 | | YP/AJ | Ok |
| 15 | 20 PPM AROMATIC HC | 20 PPM AROMATIC HC | FD049126.D | 27 Feb 2025 17:45 | | YP/AJ | Ok,M |

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**Instrument ID:** FID_D

## Daily Analysis Runlog For Sequence/QCBatch ID # FD022825AR

| | | | | | |
|---|---|---|---|---|---|
| Review By | yogesh | Review On | 2/28/2025 11:42:15 AM | | |
| Supervise By | Ankita | Supervise On | 3/4/2025 12:54:39 PM | | |
| SubDirectory | FD022825AR | HP Acquire Method | | HP Processing Method | FD021125AR |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | |
| Initial Calibration Stds | PP23968,PP23970,PP23971,PP23972,PP23973 |
| CCC | PP23971 |
| Internal Standard/PEM | |
| ICV/I.BLK | PP23969,PP24199 |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| Sr# | SampleId | ClientID | Data File Name | Date-Time | Comment | Operator | Status |
|---|---|---|---|---|---|---|---|
| 1 | MECL2 | MECL2 | FD049127.D | 28 Feb 2025 09:10 | | YP/AJ | Ok |
| 2 | I.BLK | I.BLK | FD049128.D | 28 Feb 2025 09:46 | | YP/AJ | Ok |
| 3 | 20 PPM AROMATIC HC | 20 PPM AROMATIC HC | FD049129.D | 28 Feb 2025 10:23 | | YP/AJ | Ok,M |
| 4 | PB166923BL | PB166923BL | FD049130.D | 28 Feb 2025 11:00 | | YP/AJ | Ok |
| 5 | PB166923BS | PB166923BS | FD049131.D | 28 Feb 2025 11:37 | | YP/AJ | Ok |
| 6 | PB166923BSD | PB166923BSD | FD049132.D | 28 Feb 2025 12:13 | | YP/AJ | Ok |
| 7 | Q1415-01 | B-163-SB01 | FD049133.D | 28 Feb 2025 12:50 | | YP/AJ | Ok |
| 8 | Q1415-02 | B-172-SB01 | FD049134.D | 28 Feb 2025 13:26 | | YP/AJ | Ok |
| 9 | Q1415-03 | B-163-SB02 | FD049135.D | 28 Feb 2025 14:03 | | YP/AJ | Ok |
| 10 | Q1415-04 | B-172-SB02 | FD049136.D | 28 Feb 2025 14:40 | | YP/AJ | Ok |
| 11 | Q1421-07 | P001-CLAY-CF01-02 | FD049137.D | 28 Feb 2025 15:16 | | YP/AJ | Ok |
| 12 | I.BLK | I.BLK | FD049138.D | 28 Feb 2025 15:53 | | YP/AJ | Ok |
| 13 | 20 PPM AROMATIC HC | 20 PPM AROMATIC HC | FD049139.D | 28 Feb 2025 16:30 | | YP/AJ | Ok |
| 14 | Q1421-01 | P001-CLAY-CF01-01 | FD049140.D | 28 Feb 2025 17:44 | | YP/AJ | Ok |
| 15 | Q1421-01D | Q1421-01D | FD049141.D | 28 Feb 2025 18:20 | | YP/AJ | Ok,M |
| 16 | Q1421-02 | P001-CLAY-CF01-01M | FD049142.D | 28 Feb 2025 18:56 | FD049140.D | YP/AJ | Ok |
| 17 | Q1421-03 | P001-CLAY-CF01-01M | FD049143.D | 28 Feb 2025 19:32 | FD049140.D!FD049142.D | YP/AJ | Ok |
| 18 | Q1421-09 | P001-CLAY-CF02-01 | FD049144.D | 28 Feb 2025 20:09 | | YP/AJ | Ok |

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

**Instrument ID:** FID_D

## Daily Analysis Runlog For Sequence/QCBatch ID # FD022825AR

| | | | | | |
|---|---|---|---|---|---|
| Review By | yogesh | Review On | 2/28/2025 11:42:15 AM | | |
| Supervise By | Ankita | Supervise On | 3/4/2025 12:54:39 PM | | |
| SubDirectory | FD022825AR | HP Acquire Method | | HP Processing Method | FD021125AR |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | |
| Initial Calibration Stds | PP23968,PP23970,PP23971,PP23972,PP23973 |
| CCC | PP23971 |
| Internal Standard/PEM | |
| ICV/I.BLK | PP23969,PP24199 |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 19 | Q1422-01 | B-154-SB01 | FD049145.D | 28 Feb 2025 20:46 | | YP/AJ | Ok |
| 20 | Q1422-02 | B-154-SB02 | FD049146.D | 28 Feb 2025 21:22 | | YP/AJ | Ok |
| 21 | Q1447-01 | WC1 | FD049147.D | 28 Feb 2025 21:59 | need 25x dilution | YP/AJ | Dilution |
| 22 | I.BLK | I.BLK | FD049148.D | 28 Feb 2025 23:13 | | YP/AJ | Ok |
| 23 | 20 PPM AROMATIC HC | 20 PPM AROMATIC HC | FD049149.D | 28 Feb 2025 23:50 | | YP/AJ | Ok |

M : Manual Integration

# PERCENT SOLID

**Supervisor:** Iwona
**Analyst:** Jignesh
**Date:** 3/1/2025

**OVENTEMP IN Celsius(°C):** 107
**Time IN:** 17:05
**In Date:** 02/24/2025
**Weight Check 1.0g:** 1.00
**Weight Check 10g:** 10.00
**OvenID:** M OVEN#1

**OVENTEMP OUT Celsius(°C):** 103
**Time OUT:** 08:11
**Out Date:** 02/25/2025
**Weight Check 1.0g:** 1.00
**Weight Check 10g:** 10.00
**BalanceID:** M SC-4
**Thermometer ID:** % SOLID- OVEN

**QC:** LB134780

| 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 |
|---|---|---|---|---|---|---|---|---|
| Q1401-07 | BP-VPB-192-GW-825-827 | 1 | 1.15 | 8.83 | 9.98 | 2.04 | 10.1 | sludge sample |
| Q1401-08 | BP-VPB-192-GW-860-862 | 2 | 1.13 | 8.65 | 9.78 | 1.93 | 9.2 | sludge sample |
| Q1401-09 | BP-VPB-192-GW-880-882 | 3 | 1.13 | 8.68 | 9.81 | 1.64 | 5.9 | sludge sample |
| Q1403-05 | SVOC-GPC-BLANK | 4 | 1.00 | 1.00 | 2.00 | 2.00 | 100.0 | |
| Q1403-06 | PEST-GPC-BLANK | 5 | 1.00 | 1.00 | 2.00 | 2.00 | 100.0 | |
| Q1403-07 | PEST-GPC-BLANK-SPIKE | 6 | 1.00 | 1.00 | 2.00 | 2.00 | 100.0 | |
| Q1403-08 | PCB-GPC-BLANK | 7 | 1.00 | 1.00 | 2.00 | 2.00 | 100.0 | |
| Q1403-09 | PCB-GPC-BLANK-SPIKE | 8 | 1.00 | 1.00 | 2.00 | 2.00 | 100.0 | |
| Q1403-10 | SVOC-GPC2-BLANK | 9 | 1.00 | 1.00 | 2.00 | 2.00 | 100.0 | |
| Q1403-11 | PEST-GPC2-BLANK | 10 | 1.00 | 1.00 | 2.00 | 2.00 | 100.0 | |
| Q1403-12 | PEST-GPC2-BLANK-SPIKE | 11 | 1.00 | 1.00 | 2.00 | 2.00 | 100.0 | |
| Q1403-13 | PCB-GPC2-BLANK | 12 | 1.00 | 1.00 | 2.00 | 2.00 | 100.0 | |
| Q1403-14 | PCB-GPC2-BLANK-SPIKE | 13 | 1.00 | 1.00 | 2.00 | 2.00 | 100.0 | |
| Q1407-01 | 022125 | 14 | 1.00 | 1.00 | 2.00 | 2.00 | 100.0 | wipe sample |
| Q1411-01 | HR-02-02212025 | 15 | 1.16 | 8.48 | 9.64 | 9.09 | 93.5 | |
| Q1411-02 | HR-02-02212025-E2 | 16 | 1.15 | 8.70 | 9.85 | 9.12 | 91.6 | |
| Q1411-03 | HR-03-02212025 | 17 | 1.15 | 8.81 | 9.96 | 9.2 | 91.4 | |
| Q1411-04 | HR-03-02212025-E2 | 18 | 1.14 | 8.43 | 9.57 | 8.93 | 92.4 | |
| Q1412-01 | GAS-FUEL-ISLAND-MAT | 19 | 1.00 | 1.00 | 2.00 | 2.00 | 100.0 | CONCRETE sample |
| Q1413-01 | BU-2-022125 | 20 | 1.18 | 8.58 | 9.76 | 9.28 | 94.4 | |
| Q1413-02 | BU-2-022125 | 21 | 1.19 | 8.45 | 9.64 | 9.22 | 95.0 | |
| Q1414-01 | BUR-1316 | 22 | 1.12 | 8.78 | 9.9 | 6.68 | 63.3 | |
| Q1415-01 | B-163-SB01 | 23 | 1.15 | 8.80 | 9.95 | 8.94 | 88.5 | |
| Q1415-02 | B-172-SB01 | 24 | 1.17 | 8.60 | 9.77 | 8.62 | 86.6 | |
| Q1415-03 | B-163-SB02 | 25 | 1.13 | 8.85 | 9.98 | 7.54 | 72.4 | |
| Q1415-04 | B-172-SB02 | 26 | 1.18 | 8.77 | 9.95 | 9.05 | 89.7 | |
| Q1416-01 | OK-01-022425 | 27 | 1.15 | 8.48 | 9.63 | 8.58 | 87.6 | |
| Q1416-02 | OK-01-022425-E2 | 28 | 1.16 | 8.69 | 9.85 | 8.77 | 87.6 | |

# PERCENT SOLID

**Supervisor:** Iwona
**Analyst:** Jignesh
**Date:** 3/1/2025

**OVENTEMP IN Celsius(°C):** 107
**Time IN:** 17:05
**In Date:** 02/24/2025
**Weight Check 1.0g:** 1.00
**Weight Check 10g:** 10.00
**OvenID:** M OVEN#1

**OVENTEMP OUT Celsius(°C):** 103
**Time OUT:** 08:11
**Out Date:** 02/25/2025
**Weight Check 1.0g:** 1.00
**Weight Check 10g:** 10.00
**BalanceID:** M SC-4
**Thermometer ID:** % SOLID- OVEN

**QC:** LB134780

| 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 |
|---|---|---|---|---|---|---|---|---|
| Q1418-01 | TR-06-02242025 | 35 | 1.15 | 8.71 | 9.86 | 8.87 | 88.6 | |
| Q1418-02 | TR-06-02242025-E2 | 36 | 1.12 | 8.75 | 9.87 | 8.76 | 87.3 | |
| Q1420-01 | TP-1-WC | 29 | 1.15 | 8.82 | 9.97 | 9.04 | 89.5 | |
| Q1420-02 | TP-1-WC-EPH | 30 | 1.12 | 8.76 | 9.88 | 8.96 | 89.5 | |
| Q1420-03 | TP-1-WC-VOC | 31 | 1.14 | 8.85 | 9.99 | 9.18 | 90.8 | |
| Q1420-05 | TP-2-WC | 32 | 1.15 | 8.62 | 9.77 | 8.79 | 88.6 | |
| Q1420-06 | TP-2-WC-EPH | 33 | 1.15 | 8.40 | 9.55 | 8.63 | 89.0 | |
| Q1420-07 | TP-2-WC-VOC | 34 | 1.14 | 8.85 | 9.99 | 9.00 | 88.8 | |
| Q1421-01 | P001-CLAY-CF01-01 | 37 | 1.17 | 8.60 | 9.77 | 7.22 | 70.3 | |
| Q1421-02 | Q1421-01MS | 38 | 1.17 | 8.60 | 9.77 | 7.22 | 70.3 | |
| Q1421-03 | Q1421-01MSD | 39 | 1.17 | 8.60 | 9.77 | 7.22 | 70.3 | |
| Q1421-04 | P001-CLAY-CF01-01 | 40 | 1.00 | 9.00 | 10.00 | 1.00 | 0.0 | |
| Q1421-05 | Q1421-04MS | 41 | 1.00 | 9.00 | 10.00 | 1.00 | 0.0 | |
| Q1421-06 | Q1421-04MSD | 42 | 1.00 | 9.00 | 10.00 | 1.00 | 0.0 | |
| Q1421-07 | P001-CLAY-CF01-02 | 43 | 1.12 | 8.55 | 9.67 | 7.55 | 75.2 | |
| Q1421-08 | P001-CLAY-CF01-02 | 44 | 1.00 | 9.00 | 10.00 | 1.00 | 0.0 | |
| Q1421-09 | P001-CLAY-CF02-01 | 45 | 1.11 | 8.74 | 9.85 | 7.96 | 78.4 | |
| Q1421-10 | P001-CLAY-CF02-01 | 46 | 1.00 | 9.00 | 10.00 | 1.00 | 0.0 | |

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

# WORKLIST(Hardcopy Internal Chain)

VB134780

**WorkList Name :** %1-022425 **WorkList ID :** 187836 **Department :** Wet-Chemistry **Date :** 02-24-2025 07:59:22

| Sample | Customer Sample | Matrix | Test | Preservative | Customer | Raw Sample Storage Location | Collect Date | Method |
|---|---|---|---|---|---|---|---|---|
| Q1401-07 | BP-VPB-192-GW-825-827 | Solid | Percent Solids | 1:1 HCl to pH < 2 | TETR06 | H31 | 02/17/2025 | Chemtech -SO |
| Q1401-08 | BP-VPB-192-GW-860-862 | Solid | Percent Solids | 1:1 HCl to pH < 2 | TETR06 | H31 | 02/17/2025 | Chemtech -SO |
| Q1401-09 | BP-VPB-192-GW-880-882 | Solid | Percent Solids | 1:1 HCl to pH < 2 | TETR06 | H31 | 02/17/2025 | Chemtech -SO |
| Q1403-05 | SVOC-GPC-BLANK | Solid | Percent Solids | Cool 4 deg C | CHEM02 | H11 | 02/21/2025 | Chemtech -SO |
| Q1403-06 | PEST-GPC-BLANK | Solid | Percent Solids | Cool 4 deg C | CHEM02 | H11 | 02/21/2025 | Chemtech -SO |
| Q1403-07 | PEST-GPC-BLANK-SPIKE | Solid | Percent Solids | Cool 4 deg C | CHEM02 | H11 | 02/21/2025 | Chemtech -SO |
| Q1403-08 | PCB-GPC-BLANK | Solid | Percent Solids | Cool 4 deg C | CHEM02 | H11 | 02/21/2025 | Chemtech -SO |
| Q1403-09 | PCB-GPC-BLANK-SPIKE | Solid | Percent Solids | Cool 4 deg C | CHEM02 | H11 | 02/21/2025 | Chemtech -SO |
| Q1403-10 | SVOC-GPC2-BLANK | Solid | Percent Solids | Cool 4 deg C | CHEM02 | H11 | 02/21/2025 | Chemtech -SO |
| Q1403-11 | PEST-GPC2-BLANK | Solid | Percent Solids | Cool 4 deg C | CHEM02 | H11 | 02/21/2025 | Chemtech -SO |
| Q1403-12 | PEST-GPC2-BLANK-SPIKE | Solid | Percent Solids | Cool 4 deg C | CHEM02 | H11 | 02/21/2025 | Chemtech -SO |
| Q1403-13 | PCB-GPC2-BLANK | Solid | Percent Solids | Cool 4 deg C | CHEM02 | H11 | 02/21/2025 | Chemtech -SO |
| Q1403-14 | PCB-GPC2-BLANK-SPIKE | Solid | Percent Solids | Cool 4 deg C | CHEM02 | H11 | 02/21/2025 | Chemtech -SO |
| Q1407-01 | 022125 | Solid | Percent Solids | Cool 4 deg C | CHEM02 | H11 | 02/21/2025 | Chemtech -SO |
| Q1411-01 | HR-02-02212025 | Solid | Percent Solids | Cool 4 deg C | PSEG03 | H23 | 02/21/2025 | Chemtech -SO |
| Q1411-02 | HR-02-02212025-E2 | Solid | Percent Solids | Cool 4 deg C | PSEG05 | H31 | 02/21/2025 | Chemtech -SO |
| Q1411-03 | HR-03-02212025 | Solid | Percent Solids | Cool 4 deg C | PSEG05 | H31 | 02/21/2025 | Chemtech -SO |
| Q1411-04 | HR-03-02212025-E2 | Solid | Percent Solids | Cool 4 deg C | PSEG05 | H31 | 02/21/2025 | Chemtech -SO |
| Q1412-01 | GAS-FUEL-ISLAND-MAT | Solid | Percent Solids | Cool 4 deg C | PSEG03 | H31 | 02/21/2025 | Chemtech -SO |
| Q1413-01 | BU-2-022125 | Solid | Percent Solids | Cool 4 deg C | PSEG05 | H31 | 02/21/2025 | Chemtech -SO |
| Q1413-02 | BU-2-022125 | Solid | Percent Solids | Cool 4 deg C | PSEG05 | H31 | 02/21/2025 | Chemtech -SO |

**Date/Time** 02/24/25 15:25

**Raw Sample Received by:** JR (WDC)

**Raw Sample Relinquished by:** CR

**Date/Time** 02/24/25 17:10

**Raw Sample Received by:** CR

**Raw Sample Relinquished by:** JR (WDC)

# WORKLIST(Hardcopy Internal Chain)

LB 134780

**WorkList Name :** %1-022425 **WorkList ID :** 187836 **Department :** Wet-Chemistry **Date :** 02-24-2025 07:59:22

| Sample | Customer Sample | Matrix | Test | Preservative | Customer | Raw Sample Storage Location | Collect Date | Method |
|---|---|---|---|---|---|---|---|---|
| Q1414-01 | BUR-1316 | Solid | Percent Solids | Cool 4 deg C | PSEG03 | H31 | 02/21/2025 | Chemtech -SO |
| Q1415-01 | B-163-SB01 | Solid | Percent Solids | Cool 4 deg C | PORT06 | N31 | 02/22/2025 | Chemtech -SO |
| Q1415-02 | B-172-SB01 | Solid | Percent Solids | Cool 4 deg C | PORT06 | N31 | 02/22/2025 | Chemtech -SO |
| Q1415-03 | B-163-SB02 | Solid | Percent Solids | Cool 4 deg C | PORT06 | N31 | 02/22/2025 | Chemtech -SO |
| Q1415-04 | B-172-SB02 | Solid | Percent Solids | Cool 4 deg C | PORT06 | N31 | 02/22/2025 | Chemtech -SO |
| Q1416-01 | OK-01-022425 | Solid | Percent Solids | Cool 4 deg C | PSEG05 | N41 | 02/24/2025 | Chemtech -SO |
| Q1416-02 | OK-01-022425-E2 | Solid | Percent Solids | Cool 4 deg C | PSEG05 | N41 | 02/24/2025 | Chemtech -SO |
| Q1418-01 | TR-06-02242025 | Solid | Percent Solids | Cool 4 deg C | PSEG05 | H41 | 02/24/2025 | Chemtech -SO |
| Q1418-02 | TR-06-02242025-E2 | Solid | Percent Solids | Cool 4 deg C | PSEG05 | H41 | 02/24/2025 | Chemtech -SO |
| Q1420-01 | TP-1-WC | Solid | Percent Solids | Cool 4 deg C | PSEG03 | N41 | 02/24/2025 | Chemtech -SO |
| Q1420-02 | TP-1-WC-EPH | Solid | Percent Solids | Cool 4 deg C | PSEG03 | N41 | 02/24/2025 | Chemtech -SO |
| Q1420-03 | TP-1-WC-VOC | Solid | Percent Solids | Cool 4 deg C | PSEG03 | N41 | 02/24/2025 | Chemtech -SO |
| Q1420-05 | TP-2-WC | Solid | Percent Solids | Cool 4 deg C | PSEG03 | N41 | 02/24/2025 | Chemtech -SO |
| Q1420-06 | TP-2-WC-EPH | Solid | Percent Solids | Cool 4 deg C | PSEG03 | N41 | 02/24/2025 | Chemtech -SO |
| Q1420-07 | TP-2-WC-VOC | Solid | Percent Solids | Cool 4 deg C | PSEG03 | N41 | 02/24/2025 | Chemtech -SO |
| Q1421-01 | P001-CLAY-CF01-01 | Solid | Percent Solids | Cool 4 deg C | ROYF02 | H31 | 02/24/2025 | Chemtech -SO |
| Q1421-02 | Q1421-01MS | Solid | Percent Solids | Cool 4 deg C | ROYF02 | H31 | 02/24/2025 | Chemtech -SO |
| Q1421-03 | Q1421-01MSD | Solid | Percent Solids | Cool 4 deg C | ROYF02 | H31 | 02/24/2025 | Chemtech -SO |
| Q1421-04 | P001-CLAY-CF01-01 | Solid | Percent Solids | Cool 4 deg C | ROYF02 | H31 | 02/24/2025 | Chemtech -SO |
| Q1421-05 | Q1421-04MS | Solid | Percent Solids | Cool 4 deg C | ROYF02 | H31 | 02/24/2025 | Chemtech -SO |
| Q1421-06 | Q1421-04MSD | Solid | Percent Solids | Cool 4 deg C | ROYF02 | H31 | 02/24/2025 | Chemtech -SO |

**Date/Time** 02/24/25 15:25

**Raw Sample Received by:** SB WC)

**Raw Sample Relinquished by:** [signature]

**Date/Time** 02/24/25 17:10

**Raw Sample Received by:** [signature]

**Raw Sample Relinquished by:** SB WC)

# WORKLIST(Hardcopy Internal Chain)

VR134780

**WorkList Name :** %1-022425 **WorkList ID :** 187836 **Department :** Wet-Chemistry **Date :** 02-24-2025 07:59:22

| Sample | Customer Sample | Matrix | Test | Preservative | Customer | Raw Sample Storage Location | Collect Date | Method |
|---|---|---|---|---|---|---|---|---|
| Q1421-07 | P001-CLAY-CF01-02 | Solid | Percent Solids | Cool 4 deg C | ROYF02 | H31 | 02/24/2025 | Chemtech -SO |
| Q1421-08 | P001-CLAY-CF01-02 | Solid | Percent Solids | Cool 4 deg C | ROYF02 | H31 | 02/24/2025 | Chemtech -SO |
| Q1421-09 | P001-CLAY-CF02-01 | Solid | Percent Solids | Cool 4 deg C | ROYF02 | H31 | 02/24/2025 | Chemtech -SO |
| Q1421-10 | P001-CLAY-CF02-01 | Solid | Percent Solids | Cool 4 deg C | ROYF02 | H31 | 02/24/2025 | Chemtech -SO |

**Date/Time** 02/24/25 15:25
**Raw Sample Received by:** JR Wilson
**Raw Sample Relinquished by:** [signature]

**Date/Time** 02/24/25 17:10
**Raw Sample Received by:** [signature]
**Raw Sample Relinquished by:** JR Wilson

Alliance TECHNICAL GROUP

**SPLP EXTRACTION LOGPAGE**

PB166861

**SOP ID :** M1312-SPLP-10

**SDG No :** N/A

**Weigh By :** JP

**Balance ID :** WC SC-7

**pH Meter ID :** WC PH METER-1

**Extraction By :** JP

**Filter By :** JP

**Pippete ID :** WC

**Tumbler ID :** T-1 / T-2

**TCLP Filter ID :** 115525

**Start Prep Date :** 02/25/2025 **Time :** 14:00

**End Prep Date :** 02/26/2025 **Time :** 07:15

**Combination Ratio :** 20

**ZHE Cleaning Batch :** N/A

**Initial Room Temperature:** 23 °C

**Final Room Temperature:** 22 °C

**TCLP Technician Signature :** JP

**Supervisor By :** 12

| Standared Name | MLS USED | STD REF. # FROM LOG |
|---|---|---|
| N/A | N/A | N/A |
| N/A | N/A | N/A |
| N/A | N/A | N/A |
| N/A | N/A | N/A |
| N/A | N/A | N/A |

| Chemical Used | ML/SAMPLE U | Lot Number |
|---|---|---|
| SPLP FLUID#1 | N/A | WP110806 |
| SPLP FLUID#3 | N/A | W3112 |
| HNO3-TCLP,1N | N/A | WP110804 |
| pH Strips | W3172. | W1931,W1934,W3171,W3172 |
| pH Strips | W1941,W1942 | W3166,W1938,W1939,W1940, |
| 1 Liter Amber | N/A | 90424-08 |
| 120ml Plastic bottle | N/A | 405130101 |
| 1:1 HNO3 | N/A | MP84041 |

**Extraction Conformance/Non-Conformance Comments:**

Tumbler T-1 /T-2 CHECKED,30 RPM. Particle size reduction is not required.

| Date / Time | Prepped Sample Relinquished By/Location | Received By/Location |
|---|---|---|
| 02/26/25 11:00 | JP / TCLP Room | Sorg. RM 'RS / Ext-Prep / Wet Chem. |
| | Preparation Group | Analysis Group |

Alliance TECHNICAL GROUP

## SPLP EXTRACTION LOGPAGE

PB166861

| Sample ID | ClientID | TCLP Vessel ID | Sample Wt (g) | Volume Extraction Fluid #1 (mL) | Multi phasic | Phase Miscible | Phases Combined | Final Leachate PH | Metals Leachate Adj. PH | Prep Po |
|---|---|---|---|---|---|---|---|---|---|---|
| PB166861TB | LEB861 | 04 | N/A | 2000 | N/A | N/A | N/A | 4.24 | 1.0 | T-1 |
| Q1421-04 | P001-CLAY-CF01-01 | 01 | 100.02 | 2000 | N/A | N/A | N/A | 5.5 | 1.5 | T-1 |
| Q1421-05 | Q1421-04MS | 01 | 100.02 | 2000 | N/A | N/A | N/A | 5.5 | 1.5 | T-1 |
| Q1421-06 | Q1421-04MSD | 01 | 100.02 | 2000 | N/A | N/A | N/A | 5.5 | 1.5 | T-1 |
| Q1421-08 | P001-CLAY-CF01-02 | 02 | 100.03 | 2000 | N/A | N/A | N/A | 5.6 | 1.0 | T-1 |
| Q1421-10 | P001-CLAY-CF02-01 | 03 | 100.04 | 2000 | N/A | N/A | N/A | 5.5 | 1.5 | T-1 |

Alliance TECHNICAL GROUP

## SPLP EXTRACTION LOGPAGE

For SPLP cyanide

PB166861 TP

| Sample ID | ClientID | TCLP Vessel ID | Sample Wt (g) | Volume Extraction Fluid #1 (mL) | Multi phasic | Phase Miscible | Phases Combined | Final Leachate PH | Metals Leachate Adj. PH | Prep Pos |
|---|---|---|---|---|---|---|---|---|---|---|
| PB166861TB | LEB861 | 14 | N/A | 2000 | N/A | N/A | N/A | 5.03 | 11.0 | T-2 |
| Q1421-04 | P001-CLAY-CF01-01 | 11 | 100.04 | 2000 | N/A | N/A | N/A | 6.0 | 11.5 | T-2 |
| Q1421-05 | Q1421-04MS | 11 | 100.04 | 2000 | N/A | N/A | N/A | 6.0 | 11.5 | T-2 |
| Q1421-06 | Q1421-04MSD | 11 | 100.04 | 2000 | N/A | N/A | N/A | 6.0 | 11.5 | T-2 |
| Q1421-08 | P001-CLAY-CF01-02 | 12 | 100.03 | 2000 | N/A | N/A | N/A | 6.2 | 12.0 | T-2 |
| Q1421-10 | P001-CLAY-CF02-01 | 13 | 100.05 | 2000 | N/A | N/A | N/A | 6.0 | 11.5 | T-2 |

| SampleID | ClientID | Sample Weight (g) | Filter Weight (g) | Filtrate (mL) | Filter + Solid (After 100°C) | % solids | % Dry Solids |
|---|---|---|---|---|---|---|---|
| PB166861TB | LEB861 | N/A | N/A | N/A | N/A | N/A | N/A |
| Q1421-04 | P001-CLAY-CF01-01 | N/A | N/A | N/A | N/A | 100 | N/A |
| Q1421-05 | Q1421-04MS | N/A | N/A | N/A | N/A | 100 | N/A |
| Q1421-06 | Q1421-04MSD | N/A | N/A | N/A | N/A | 100 | N/A |
| Q1421-08 | P001-CLAY-CF01-02 | N/A | N/A | N/A | N/A | 100 | N/A |
| Q1421-10 | P001-CLAY-CF02-01 | N/A | N/A | N/A | N/A | 100 | N/A |

Alliance TECHNICAL GROUP

**SPLP Fluid Determination**

PB166861

**Hot Block ID :** WC S-1 /WC S-2

**Thermometer ID :** FLASHPOINT

| SampleID | ClientID | Sample Weight (g) | Volume DI Water (mL) | PH after 5 min stir | PH after 10 min stir | Extraction Fluid 1 or 2 | pH Extraction Fluid |
|---|---|---|---|---|---|---|---|
| PB166861TB | LEB861 | N/A | N/A | N/A | N/A | #1 | 4.24 |
| Q1421-04 | P001-CLAY-CF01-01 | N/A | N/A | N/A | N/A | #1 | 4.24 |
| Q1421-05 | Q1421-04MS | N/A | N/A | N/A | N/A | #1 | 4.24 |
| Q1421-06 | Q1421-04MSD | N/A | N/A | N/A | N/A | #1 | 4.24 |
| Q1421-08 | P001-CLAY-CF01-02 | N/A | N/A | N/A | N/A | #1 | 4.24 |
| Q1421-10 | P001-CLAY-CF02-01 | N/A | N/A | N/A | N/A | #1 | 4.24 |

# WORKLIST(Hardcopy Internal Chain)

**WorkList Name :** splp q1421 **WorkList ID :** 187869 **Department :** TCLP Extraction **Date :** 02-25-2025 10:58:37

| Sample | Customer Sample | Matrix | Test | Preservative | Customer | Raw Sample Storage Location | Collect Date | Method |
|---|---|---|---|---|---|---|---|---|
| Q1421-04 | P001-CLAY-CF01-01 | Solid | SPLP Extraction | 1:1 HNO3 to pH < 2 | ROYF02 | H31 | 02/24/2025 | 1312 |
| Q1421-05 | Q1421-04MS | Solid | SPLP Extraction | 1:1 HNO3 to pH < 2 | ROYF02 | H31 | 02/24/2025 | 1312 |
| Q1421-06 | Q1421-04MSD | Solid | SPLP Extraction | 1:1 HNO3 to pH < 2 | ROYF02 | H31 | 02/24/2025 | 1312 |
| Q1421-08 | P001-CLAY-CF01-02 | Solid | SPLP Extraction | 1:1 HNO3 to pH < 2 | ROYF02 | H31 | 02/24/2025 | 1312 |
| Q1421-10 | P001-CLAY-CF02-01 | Solid | SPLP Extraction | 1:1 HNO3 to pH < 2 | ROYF02 | H31 | 02/24/2025 | 1312 |

**Date/Time** 02/25/25 12:00

**Raw Sample Received by:** [illegible]

**Raw Sample Relinquished by:** JD CSM

**Date/Time** 02/25/25 16:00

**Raw Sample Received by:** JD CSM

**Raw Sample Relinquished by:** [illegible]

Alliance TECHNICAL GROUP

# EXTRACTION LOGPAGE

PB166883

**SOP ID:** MNJDEP-EPH-7

**Clean Up SOP #:** N/A

**Matrix :** Water

**Weigh By:** N/A

**Balance check:** N/A

**Balance ID:** N/A

**pH Strip Lot#:** E3880

**Extraction By:** RS

**Filter By:** RS

**pH Meter ID:** N/A

**Hood ID:** 4,6,7

**Extraction Start Date :** 02/26/2025

**Extraction Start Time :** 11:45

**Extraction End Date :** 02/27/2025

**Extraction End Time :** 10:15

**Concentration By:** EH

**Supervisor By :** RUPESH

**Extraction Method:** [√] Seperatory Funnel [ ] Continious Liquid/Liquid [ ] Sonication [ ] Waste Dilution [ ] Soxhlet

| Standared Name | MLS USED | Concentration ug/mL | STD REF. # FROM LOG |
|---|---|---|---|
| Spike Sol 1 | 1.0ML | 100 PPM | PP24207 |
| Surrogate | 1.0ML | 100 PPM | PP24119 |
| Fractionation Surrogate | 1.0ML | 100 PPM | PP24108 |
| N/A | N/A | N/A | N/A |
| N/A | N/A | N/A | N/A |

| Chemical Used | ML/SAMPLE USED | Lot Number |
|---|---|---|
| Methylene Chloride | N/A | E3878 |
| Baked Na2SO4 | N/A | EP2589 |
| Hexane | N/A | E3877 |
| 6N HCL | N/A | EP2569 |
| EPH Cartridge | N/A | E3757 |
| N/A | N/A | N/A |
| N/A | N/A | N/A |
| N/A | N/A | N/A |
| N/A | N/A | N/A |
| N/A | N/A | N/A |
| N/A | N/A | N/A |
| N/A | N/A | N/A |
| N/A | N/A | N/A |
| N/A | N/A | N/A |

**Extraction Conformance/Non-Conformance Comments:**

1.5ML Vial Lot # 2210673.

**KD Bath ID:** WATER BATH-1,2

**KD Bath Temperature:** 60 °C

**Envap ID:** NEVAP-02

**Envap Temperature:** 40 °C

| Date / Time | Prepped Sample Relinquished By/Location | Received By/Location |
|---|---|---|
| 2/27/25 | RS (EH-Lab) | Y-P-Pesthp GB. |
| 10:20 | **Preparation Group** | **Analysis Group** |

Alliance TECHNICAL GROUP

**EXTRACTION LOGPAGE**

**PrepBatch ID : PB166883**

**Analytical Method:** MNJDEP-EPH-7

**Concentration Date:** 02/27/2025

| Sample ID | Client Sample ID | Test | g /mL | PH | Surr/Spike By: | | Final Vol. (mL) | JarID | Comments | Prep Pos |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | AddedBy | VerifiedBy | | | | |
| PB166883BL | PB166883BL | EPH | 1000 | <2 | RUPESH | ritesh | 2 | | | SEP-1 |
| PB166883BS | PB166883BS | EPH | 1000 | <2 | RUPESH | ritesh | 2 | | | 2 |
| PB166883TB | PB166883TB | EPH | 1000 | <2 | RUPESH | ritesh | 2 | | | 3 |
| Q1421-04 | P001-CLAY-CF01-01 | EPH | 1000 | <2 | RUPESH | ritesh | 2 | | A | 4 |
| Q1421-05 | Q1421-04MS | EPH | 1000 | <2 | RUPESH | ritesh | 2 | | A | 5 |
| Q1421-06 | Q1421-04MSD | EPH | 1000 | <2 | RUPESH | ritesh | 2 | | A | 6 |
| Q1421-08 | P001-CLAY-CF01-02 | EPH | 1000 | <2 | RUPESH | ritesh | 2 | | A | 7 |
| Q1421-10 | P001-CLAY-CF02-01 | EPH | 1000 | <2 | RUPESH | ritesh | 2 | | A | 8 |

Rs
2/27

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

Alliance TECHNICAL GROUP

## SPLP EXTRACTION LOGPAGE

PB166861

| Sample ID | ClientID | TCLP Vessel ID | Sample Wt (g) | Volume Extraction Fluid #1 (mL) | Multi phasic | Phase Miscible | Phases Combined | Final Leachate PH | Metals Leachate Adj. PH | Prep Pos |
|---|---|---|---|---|---|---|---|---|---|---|
| PB166861TB | LEB861 | 04 | N/A | 2000 | N/A | N/A | N/A | 4.24 | 1.0 | T-1 |
| Q1421-04 | P001-CLAY-CF01-01 | 01 | 100.02 | 2000 | N/A | N/A | N/A | 5.5 | 1.5 | T-1 |
| Q1421-05 | Q1421-04MS | 01 | 100.02 | 2000 | N/A | N/A | N/A | 5.5 | 1.5 | T-1 |
| Q1421-06 | Q1421-04MSD | 01 | 100.02 | 2000 | N/A | N/A | N/A | 5.5 | 1.5 | T-1 |
| Q1421-08 | P001-CLAY-CF01-02 | 02 | 100.03 | 2000 | N/A | N/A | N/A | 5.6 | 1.0 | T-1 |
| Q1421-10 | P001-CLAY-CF02-01 | 03 | 100.04 | 2000 | N/A | N/A | N/A | 5.5 | 1.5 | T-1 |

02/26/13

11:00

Alliance TECHNICAL GROUP

# EXTRACTION LOGPAGE

PB166923

**SOP ID:** MNJDEP-EPH-7

**Clean Up SOP #:** N/A

**Matrix :** Solid

**Weigh By:** EH

**Balance check:** RJ

**Balance ID:** EX-SC-2

**pH Strip Lot#:** N/A

**Extraction By:** RJ

**Filter By:** RJ

**pH Meter ID:** N/A

**Hood ID:** 3,7

**Extraction Start Date :** 02/27/2025

**Extraction Start Time :** 13:10

**Extraction End Date :** 02/28/2025

**Extraction End Time :** 10:45

**Concentration By:** EH

**Supervisor By :** RUPESH

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

| Standared Name | MLS USED | Concentration ug/mL | STD REF. # FROM LOG |
|---|---|---|---|
| Spike Sol 1 | 1.0ML | 100 PPM | PP24207 |
| Surrogate | 1.0ML | 100 PPM | PP24119 |
| Fractionation Surrogate | 1.0ML | 100 PPM | PP24108 |
| 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 | EP2591 |
| Baked Na2SO4 | N/A | EP2590 |
| Sand | N/A | E2865 |
| Hexane | N/A | E3877 |
| Methylene Chloride | N/A | E3878 |
| EPH Cartridge | N/A | E3757 |
| N/A | N/A | N/A |
| N/A | N/A | N/A |
| N/A | N/A | N/A |
| N/A | N/A | N/A |
| N/A | N/A | N/A |
| N/A | N/A | N/A |
| N/A | N/A | N/A |
| N/A | N/A | N/A |
| N/A | N/A | N/A |

**Extraction Conformance/Non-Conformance Comments:**

1.5ML Vial Lot # 2210673.

**KD Bath ID:** N/A

**KD Bath Temperature:** N/A

**Envap ID:** NEVAP-02

**Envap Temperature:** 40 °C

| Date / Time | Prepped Sample Relinquished By/Location | Received By/Location |
|---|---|---|
| 2/28/25 | RS (Ext-lab) | Y.P.Pest1PCR |
| 10:50 | Preparation Group | Analysis Group |

Alliance TECHNICAL GROUP

**EXTRACTION LOGPAGE**

**PrepBatch ID : PB166923**

**Analytical Method:** MNJDEP-EPH-7

**Concentration Date:** 02/28/2025

| Sample ID | Client Sample ID | Test | g / mL | PH | Surr/Spike By: | | Final Vol. (mL) | JarID | Comments | Prep Pos |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | AddedBy | VerifiedBy | | | | |
| PB166923BL | PB166923BL | EPH | 30.02 | N/A | ritesh | Evelyn | 2 | | | U2-1 |
| PB166923BS | PB166923BS | EPH | 30.03 | N/A | ritesh | Evelyn | 2 | | | 2 |
| PB166923BSD | PB166923BSD | EPH | 30.02 | N/A | ritesh | Evelyn | 2 | | | 3 |
| Q1415-01 | B-163-SB01 | EPH | 30.06 | N/A | ritesh | Evelyn | 2 | E | | 4 |
| Q1415-02 | B-172-SB01 | EPH | 30.05 | N/A | ritesh | Evelyn | 2 | E | | 5 |
| Q1415-03 | B-163-SB02 | EPH | 30.03 | N/A | ritesh | Evelyn | 2 | E | | 6 |
| Q1415-04 | B-172-SB02 | EPH | 30.08 | N/A | ritesh | Evelyn | 2 | E | | U6-1 |
| Q1421-01 | P001-CLAY-CF01-01 | EPH | 30.05 | N/A | ritesh | Evelyn | 2 | E | | 2 |
| Q1421-01DUP | P001-CLAY-CF01-01DUP | EPH | 30.04 | N/A | ritesh | Evelyn | 2 | E | | 3 |
| Q1421-02 | Q1421-01MS | EPH | 30.07 | N/A | ritesh | Evelyn | 2 | E | | 4 |
| Q1421-03 | Q1421-01MSD | EPH | 30.03 | N/A | ritesh | Evelyn | 2 | E | | 5 |
| Q1421-07 | P001-CLAY-CF01-02 | EPH | 30.06 | N/A | ritesh | Evelyn | 2 | F | | 6 |
| Q1421-09 | P001-CLAY-CF02-01 | EPH | 30.02 | N/A | ritesh | Evelyn | 2 | E | | U3-1 |
| Q1422-01 | B-154-SB01 | EPH | 30.07 | N/A | ritesh | Evelyn | 2 | E | | 2 |
| Q1422-02 | B-154-SB02 | EPH | 30.05 | N/A | ritesh | Evelyn | 2 | E | | 3 |
| Q1447-01 | WC1 | EPH | 30.01 | N/A | ritesh | Evelyn | 2 | B | | 4 |

RS 2/28

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

16692-
13:10

# WORKLIST(Hardcopy Internal Chain)

**WorkList Name :** Q1447 **WorkList ID :** 187944 **Department :** Extraction **Date :** 02-27-2025 13:05:00

| Sample | Customer Sample | Matrix | Test | Preservative | Customer | Raw Sample Storage Location | Collect Date | Method |
|---|---|---|---|---|---|---|---|---|
| Q1415-01 | B-163-SB01 | Solid | EPH | Cool 4 deg C | PORT06 | N31 | 02/22/2025 | NJEPH |
| Q1415-02 | B-172-SB01 | Solid | EPH | Cool 4 deg C | PORT06 | N31 | 02/22/2025 | NJEPH |
| Q1415-03 | B-163-SB02 | Solid | EPH | Cool 4 deg C | PORT06 | N31 | 02/22/2025 | NJEPH |
| Q1415-04 | B-172-SB02 | Solid | EPH | Cool 4 deg C | PORT06 | N31 | 02/22/2025 | NJEPH |
| Q1421-01 | P001-CLAY-CF01-01 | Solid | EPH | Cool 4 deg C | ROYF02 | H31 | 02/24/2025 | NJEPH |
| Q1421-02 | Q1421-01MS | Solid | EPH | Cool 4 deg C | ROYF02 | H31 | 02/24/2025 | NJEPH |
| Q1421-03 | Q1421-01MSD | Solid | EPH | Cool 4 deg C | ROYF02 | H31 | 02/24/2025 | NJEPH |
| Q1421-07 | P001-CLAY-CF01-02 | Solid | EPH | Cool 4 deg C | ROYF02 | H31 | 02/24/2025 | NJEPH |
| Q1421-09 | P001-CLAY-CF02-01 | Solid | EPH | Cool 4 deg C | ROYF02 | H31 | 02/24/2025 | NJEPH |
| Q1422-01 | B-154-SB01 | Solid | EPH | Cool 4 deg C | PORT06 | H33 | 02/23/2025 | NJEPH |
| Q1422-02 | B-154-SB02 | Solid | EPH | Cool 4 deg C | PORT06 | H33 | 02/23/2025 | NJEPH |
| Q1447-01 | WC1 | Solid | EPH | Cool 4 deg C | GENV01 | H33 | 02/23/2025 | NJEPH |

**Date/Time** 2/27/25 13:05
**Raw Sample Received by:** RJ (Ext-Lab)
**Raw Sample Relinquished by:** CP SM

**Date/Time** 2/27/25 13:30
**Raw Sample Received by:** CP SM
**Raw Sample Relinquished by:** RJ (Ext-Lab)

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# Prep Standard - Chemical Standard Summary

**Order ID :** Q1421

**Test :** EPH

**Prepbatch ID :** PB166883,PB166923,

**Sequence ID/Qc Batch ID:** FC022725AL,FC022825AL,FD022725AR,FD022825AR,

**Standard ID :**
EP2569,EP2589,EP2590,EP2591,PP23968,PP23969,PP23970,PP23971,PP23972,PP23973,PP24108,PP24119,PP24170,PP24174,PP24175,PP24176,PP24177,PP24178,PP24179,PP24199,PP24207,

**Chemical ID :**
E2865,E3551,E3757,E3828,E3846,E3876,E3877,E3878,M6121,P10260,P11139,P12363,P12981,P12983,P13279,P13465,P13472,P13595,P13597,P13598,P13607,P13638,P13639,P13640,P13641,P13642,P13644,P13646,P13647,P13650,P13652,P13654,P13661,P13671,P13685,P13715,P13717,P13744,P13748,P13766,P13769,P13802,P13803,P13809,P13828,P13836,P13840,P13842,P13846,P13855,P13858,P13859,P13860,W3112,W3153,W3177,

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# Extractions STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 3319 | 6N HCL | EP2569 | 12/02/2024 | 05/13/2025 | Rajesh Parikh | None | None | RUPESHKUMAR SHAH 12/02/2024 |

**FROM** 219.00000ml of M6121 + 781.00000ml of W3112 = Final Quantity: 1000.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 3923 | Baked Sodium Sulfate | EP2589 | 02/14/2025 | 07/01/2025 | Rajesh Parikh | Extraction_SCALE_2 (EX-SC-2) | None | RUPESHKUMAR SHAH 02/14/2025 |

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

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# Extractions STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 3923 | Baked Sodium Sulfate | EP2590 | 02/26/2025 | 07/01/2025 | RUPESHKUMAR SHAH | Extraction_SCALE_2 (EX-SC-2) | None | Riteshkumar Patel 02/26/2025 |

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

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 2017 | 1:1 ACETONE/METHYLENE CHLORIDE | EP2591 | 02/26/2025 | 08/14/2025 | RUPESHKUMAR SHAH | None | None | Riteshkumar Patel 02/26/2025 |

**FROM** 8000.00000ml of E3876 + 8000.00000ml of E3878 = Final Quantity: 16000.000 ml

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# Pest/Pcb STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 782 | 100 PPM Aromatic HC Working STD | PP23968 | 11/14/2024 | 05/09/2025 | Yogesh Patel | None | None | Ankita Jodhani 11/21/2024 |

**FROM** 0.25000ml of P13646 + 0.62500ml of P13465 + 1.25000ml of P10260 + 22.87500ml of E3828 = Final Quantity: 25.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 2945 | 100 PPM Aromatic HC Working STD (Absolute) | PP23969 | 11/14/2024 | 05/09/2025 | Yogesh Patel | None | None | Ankita Jodhani 11/21/2024 |

**FROM** 0.25000ml of P13647 + 0.62500ml of P13472 + 1.25000ml of P11139 + 22.87500ml of E3828 = Final Quantity: 25.000 ml

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# Pest/Pcb STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 787 | 50 PPM Aromatic HC STD | PP23970 | 11/14/2024 | 05/09/2025 | Yogesh Patel | None | None | Ankita Jodhani 11/21/2024 |

**FROM** 0.50000ml of E3828 + 0.50000ml of PP23968 = Final Quantity: 1.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 788 | 20 PPM Aromatic HC STD | PP23971 | 11/14/2024 | 05/09/2025 | Yogesh Patel | None | None | Ankita Jodhani 11/21/2024 |

**FROM** 0.80000ml of E3828 + 0.20000ml of PP23968 = Final Quantity: 1.000 ml

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# Pest/Pcb STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 789 | 10 PPM Aromatic HC STD | PP23972 | 11/14/2024 | 05/09/2025 | Yogesh Patel | None | None | Ankita Jodhani 11/21/2024 |

**FROM** 0.90000ml of E3828 + 0.10000ml of PP23968 = Final Quantity: 1.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 790 | 5 PPM Aromatic HC STD | PP23973 | 11/14/2024 | 05/09/2025 | Yogesh Patel | None | None | Ankita Jodhani 11/21/2024 |

**FROM** 0.90000ml of E3828 + 0.10000ml of PP23970 = Final Quantity: 1.000 ml

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# Pest/Pcb STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 1331 | 100 PPM NJEPH Fractionating Surrogate | PP24108 | 01/14/2025 | 07/14/2025 | Yogesh Patel | None | None | Ankita Jodhani 01/15/2025 |

**FROM** 1.25000ml of P13744 + 1.25000ml of P13748 + 1.25000ml of P13766 + 1.25000ml of P13769 + 195.00000ml of W3153 = Final Quantity: 200.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 1339 | 100 PPM NJEPH Surrogate Spike | PP24119 | 01/16/2025 | 06/26/2025 | Yogesh Patel | None | None | Ankita Jodhani 01/16/2025 |

**FROM** 1.25000ml of P13595 + 1.25000ml of P13597 + 1.25000ml of P13598 + 1.25000ml of P13607 + 1.25000ml of P13652 + 1.25000ml of P13654 + 1.25000ml of P13661 + 1.25000ml of P13685 + 490.00000ml of E3846 = Final Quantity: 200.000 ml

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# Pest/Pcb STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 781 | 100 PPM Aliphatic HC Working STD (Restek) | PP24170 | 02/03/2025 | 08/03/2025 | Yogesh Patel | None | None | Ankita Jodhani 02/03/2025 |

**FROM** 0.25000ml of P12981 + 0.25000ml of P13671 + 1.25000ml of P12363 + 23.25000ml of W3177 = Final Quantity: 25.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 2900 | 100 PPM Aliphatic HC STD (Absolute) | PP24174 | 02/03/2025 | 08/03/2025 | Yogesh Patel | None | None | Ankita Jodhani 02/03/2025 |

**FROM** 0.25000ml of P12983 + 0.25000ml of P13650 + 2.50000ml of P13279 + 22.00000ml of W3177 = Final Quantity: 25.000 ml

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# Pest/Pcb STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 783 | 50 PPM Aliphatic HC STD | PP24175 | 02/03/2025 | 08/03/2025 | Yogesh Patel | None | None | Ankita Jodhani 02/03/2025 |

**FROM** 0.50000ml of W3177 + 0.50000ml of PP24170 = Final Quantity: 1.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 784 | 20 PPM Aliphatic HC STD | PP24176 | 02/03/2025 | 08/03/2025 | Yogesh Patel | None | None | Ankita Jodhani 02/03/2025 |

**FROM** 0.80000ml of W3177 + 0.20000ml of PP24170 = Final Quantity: 1.000 ml

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# Pest/Pcb STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 785 | 10 PPM Aliphatic HC STD | PP24177 | 02/03/2025 | 08/03/2025 | Yogesh Patel | None | None | Ankita Jodhani 02/03/2025 |

**FROM** 0.90000ml of W3177 + 0.10000ml of PP24170 = Final Quantity: 1.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 786 | 5 PPM Aliphatic HC STD | PP24178 | 02/03/2025 | 08/03/2025 | Yogesh Patel | None | None | Ankita Jodhani 02/03/2025 |

**FROM** 0.90000ml of W3177 + 0.10000ml of PP24175 = Final Quantity: 1.000 ml

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# Pest/Pcb STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 2901 | 20 PPM Aliphaitic HC STD ICV (Absolute) | PP24179 | 02/03/2025 | 08/03/2025 | Yogesh Patel | None | None | Ankita Jodhani 02/03/2025 |

**FROM** 0.80000ml of W3177 + 0.20000ml of PP24174 = Final Quantity: 1.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 2946 | 20 PPM Aromatic HC STD ICV (Absolute) | PP24199 | 11/14/2024 | 05/09/2025 | Yogesh Patel | None | None | Abdul Mirza 03/06/2025 |

**FROM** 0.80000ml of E3878 + 0.20000ml of PP23969 = Final Quantity: 1.000 ml

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# Pest/Pcb STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 1330 | 100 PPM NJEPH Spike Solution | PP24207 | 02/26/2025 | 08/26/2025 | Yogesh Patel | None | None | Ankita Jodhani 02/27/2025 |

**FROM** 5.00000ml of P13638 + 5.00000ml of P13639 + 5.00000ml of P13640 + 5.00000ml of P13641 + 5.00000ml of P13642 + 5.00000ml of P13644 + 5.00000ml of P13715 + 5.00000ml of P13717 + 5.00000ml of P13802 + 5.00000ml of P13803 + 5.00000ml of P13809 + 5.00000ml of P13828 + 5.00000ml of P13836 + 5.00000ml of P13840 + 5.00000ml of P13842 + 5.00000ml of P13846 + 5.00000ml of P13855 + 5.00000ml of P13858 + 5.00000ml of P13859 + 5.00000ml of P13860 = Final Quantity: 100.000 ml

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# CHEMICAL RECEIPT LOG BOOK

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

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

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| phenomenex | SI500025-30 / Cleanert SPE Silica, 5000 mg/25 ml | Z0513CK1 | 09/04/2025 | 09/04/2024 / Rajesh | 04/03/2024 / Rajesh | E3757 |

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

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

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Seidler Chemical | BA-9254-03 / Acetone, Ultra Resi (cs/4x4L) | 24H2762008 | 08/25/2025 | 02/25/2025 / | 02/12/2025 / Rajesh | E3876 |

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# CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Seidler Chemical | BA-9262-03 / Hexane, Ultra-Resi (cs/4x4L) | 243570 | 08/12/2025 | 02/12/2025 / Rajesh | 02/12/2025 / Rajesh | E3877 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Seidler Chemical | BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L) | 24K1762005 | 08/14/2025 | 02/14/2025 / Rajesh | 12/27/2024 / Rajesh | E3878 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Seidler Chemical | BA-9530-33 / Hydrochloric Acid, Instra-Analyzed (cs/6x2.5L) | 0000275677 | 05/13/2025 | 11/13/2024 / Eman | 10/13/2024 / Eman | M6121 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30541 / Custom NJEPH Aromatics Calibration Standard | A0165529 | 05/14/2025 | 11/14/2024 / yogesh | 01/26/2021 / dhaval | P10260 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 95709 / NJ EPH Aromatic Hydrocarbons, 2000 PPM | 060420 | 05/14/2025 | 11/14/2024 / yogesh | 10/29/2021 / Abdul | P11139 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30540 / Custom NJEPH Aliphatics Calibration Standard | A0190424 | 08/03/2025 | 02/03/2025 / yogesh | 03/16/2023 / Yogesh | P12363 |

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# CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 31098 / 1-Chlorooctadecane Standard | A0204989 | 08/03/2025 | 02/03/2025 / yogesh | 12/20/2023 / Yogesh | P12981 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 31098 / 1-Chlorooctadecane Standard | A0204989 | 08/03/2025 | 02/03/2025 / yogesh | 12/20/2023 / Yogesh | P12983 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 95899 / NJ EPH Aliphatic n-Hydrocarbons-Revised, 1000 PPM | 040524 | 08/03/2025 | 02/03/2025 / yogesh | 04/11/2024 / yogesh | P13279 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 31480 / MA Fractionation Surrogate Spike Mix | A0210831 | 05/14/2025 | 11/14/2024 / yogesh | 07/23/2024 / yogesh | P13465 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 31480 / MA Fractionation Surrogate Spike Mix | A0210831 | 05/14/2025 | 11/14/2024 / yogesh | 07/23/2024 / yogesh | P13472 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 31098 / 1-Chlorooctadecane Standard | A0213283 | 01/16/2026 | 01/16/2025 / yogesh | 10/16/2024 / yogesh | P13595 |

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# CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 31098 / 1-Chlorooctadecane Standard | A0213283 | 01/16/2026 | 01/16/2025 / yogesh | 10/16/2024 / yogesh | P13597 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 31098 / 1-Chlorooctadecane Standard | A0213283 | 01/16/2026 | 01/16/2025 / yogesh | 10/16/2024 / yogesh | P13598 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 31098 / 1-Chlorooctadecane Standard | A0213283 | 01/16/2026 | 01/16/2025 / yogesh | 10/16/2024 / yogesh | P13607 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30542 / Custom NJEPH Aliphatics Matrix Spike Mix | A0211112 | 08/26/2025 | 02/26/2025 / yogesh | 10/16/2024 / yogesh | P13638 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30542 / Custom NJEPH Aliphatics Matrix Spike Mix | A0211112 | 08/26/2025 | 02/26/2025 / yogesh | 10/16/2024 / yogesh | P13639 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30542 / Custom NJEPH Aliphatics Matrix Spike Mix | A0211112 | 08/26/2025 | 02/26/2025 / yogesh | 10/16/2024 / yogesh | P13640 |

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# CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30542 / Custom NJEPH Aliphatics Matrix Spike Mix | A0211112 | 08/26/2025 | 02/26/2025 / yogesh | 10/16/2024 / yogesh | P13641 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30542 / Custom NJEPH Aliphatics Matrix Spike Mix | A0211112 | 08/26/2025 | 02/26/2025 / yogesh | 10/16/2024 / yogesh | P13642 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30542 / Custom NJEPH Aliphatics Matrix Spike Mix | A0211112 | 08/26/2025 | 02/26/2025 / yogesh | 10/16/2024 / yogesh | P13644 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 31097 / o-Terphenyl Standard | A0216631 | 05/14/2025 | 11/14/2024 / yogesh | 10/16/2024 / yogesh | P13646 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 31097 / o-Terphenyl Standard | A0216631 | 05/14/2025 | 11/14/2024 / yogesh | 10/16/2024 / yogesh | P13647 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 31097 / o-Terphenyl Standard | A0216631 | 08/03/2025 | 02/03/2025 / yogesh | 10/16/2024 / yogesh | P13650 |

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# CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 31097 / o-Terphenyl Standard | A0216631 | 01/16/2026 | 01/16/2025 / yogesh | 10/16/2024 / yogesh | P13652 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 31097 / o-Terphenyl Standard | A0216631 | 01/16/2026 | 01/16/2025 / yogesh | 10/16/2024 / yogesh | P13654 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 31097 / o-Terphenyl Standard | A0216631 | 01/16/2026 | 01/16/2025 / yogesh | 10/16/2024 / yogesh | P13661 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 31097 / o-Terphenyl Standard | A0216631 | 08/03/2025 | 02/03/2025 / yogesh | 10/16/2024 / yogesh | P13671 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 31097 / o-Terphenyl Standard | A0216631 | 01/16/2026 | 01/16/2025 / yogesh | 10/16/2024 / yogesh | P13685 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30543 / Custom NJEPH Aromatics Matrix Spike Mix | A0211254 | 08/26/2025 | 02/26/2025 / yogesh | 10/24/2024 / yogesh | P13715 |

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# CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30543 / Custom NJEPH Aromatics Matrix Spike Mix | A0217838 | 08/26/2025 | 02/26/2025 / yogesh | 10/24/2024 / yogesh | P13717 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 31480 / MA Fractionation Surrogate Spike Mix | A0214879 | 07/14/2025 | 01/14/2025 / yogesh | 11/01/2024 / yogesh | P13744 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 31480 / MA Fractionation Surrogate Spike Mix | A0214879 | 07/14/2025 | 01/14/2025 / yogesh | 11/01/2024 / yogesh | P13748 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 31480 / MA Fractionation Surrogate Spike Mix | A0214879 | 07/14/2025 | 01/14/2025 / yogesh | 11/01/2024 / yogesh | P13766 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 31480 / MA Fractionation Surrogate Spike Mix | A0214879 | 07/14/2025 | 01/14/2025 / yogesh | 11/01/2024 / yogesh | P13769 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30542 / Custom NJEPH Aliphatics Matrix Spike Mix | A0217408 | 08/26/2025 | 02/26/2025 / yogesh | 12/09/2024 / yogesh | P13802 |

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# CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30542 / Custom NJEPH Aliphatics Matrix Spike Mix | A0217408 | 08/26/2025 | 02/26/2025 / yogesh | 12/09/2024 / yogesh | P13803 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30542 / Custom NJEPH Aliphatics Matrix Spike Mix | A0217408 | 08/26/2025 | 02/26/2025 / yogesh | 12/09/2024 / yogesh | P13809 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30542 / Custom NJEPH Aliphatics Matrix Spike Mix | A0217408 | 08/26/2025 | 02/26/2025 / yogesh | 12/09/2024 / yogesh | P13828 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30543 / Custom NJEPH Aromatics Matrix Spike Mix | A0217838 | 08/26/2025 | 02/26/2025 / yogesh | 12/09/2024 / yogesh | P13836 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30543 / Custom NJEPH Aromatics Matrix Spike Mix | A0217838 | 08/26/2025 | 02/26/2025 / yogesh | 12/09/2024 / yogesh | P13840 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30543 / Custom NJEPH Aromatics Matrix Spike Mix | A0217838 | 08/26/2025 | 02/26/2025 / yogesh | 12/09/2024 / yogesh | P13842 |

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# CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30543 / Custom NJEPH Aromatics Matrix Spike Mix | A0217838 | 08/26/2025 | 02/26/2025 / yogesh | 12/09/2024 / yogesh | P13846 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30543 / Custom NJEPH Aromatics Matrix Spike Mix | A0217838 | 08/26/2025 | 02/26/2025 / yogesh | 12/09/2024 / yogesh | P13855 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30543 / Custom NJEPH Aromatics Matrix Spike Mix | A0217838 | 08/26/2025 | 02/26/2025 / yogesh | 12/09/2024 / yogesh | P13858 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30543 / Custom NJEPH Aromatics Matrix Spike Mix | A0217838 | 08/26/2025 | 02/26/2025 / yogesh | 12/09/2024 / yogesh | P13859 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30543 / Custom NJEPH Aromatics Matrix Spike Mix | A0217838 | 08/26/2025 | 02/26/2025 / yogesh | 12/09/2024 / yogesh | P13860 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Seidler Chemical | DIW / DI Water | Daily Lab-Certified | 07/03/2029 | 07/03/2024 / Iwona | 07/03/2024 / Iwona | W3112 |

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# CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Seidler Chemical | BA-9262-03 / Hexane, Ultra-Resi (cs/4x4L) | 24G1962003 | 08/22/2025 | 11/25/2024 / jignesh | 11/21/2024 / jignesh | W3153 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Seidler Chemical | BA-9262-03 / Hexane, Ultra-Resi (cs/4x4L) | 24G1962003 | 08/22/2025 | 02/03/2025 / jignesh | 01/31/2025 / jignesh | W3177 |

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# CERTIFIED REFERENCE MATERIAL

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

# 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.*

DD
06/17/2021

**Catalog No. :** 30541 **Lot No.:** A0172403

**Description :** NJEPH Aromatics Calibration Standard

NJEPH Aromatics Calibration Standard 2,000µg/mL, Methylene Chloride, 1mL/ampul

P10758 to P10762 -(5)

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

**Expiration Date :** April 30, 2027 **Storage:** 10°C or colder

**Handling:** Sonication required. Mix is photosensitive. **Ship:** Ambient

## CERTIFIED VALUES

| Elution Order | Compound | | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | |
|---|---|---|---|---|---|
| 1 | 1,2,3-Trimethylbenzene<br>**CAS #** 526-73-8<br>**Purity** 98% | (Lot 8776.10-36) | 2,010.0 µg/mL | +/- 11.7957 µg/mL<br>+/- 90.5449 µg/mL<br>+/- 100.4678 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 2 | Naphthalene<br>**CAS #** 91-20-3<br>**Purity** 99% | (Lot MKBZ8680V) | 2,006.0 µg/mL | +/- 11.7723 µg/mL<br>+/- 90.3656 µg/mL<br>+/- 100.2689 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 3 | 2-Methylnaphthalene<br>**CAS #** 91-57-6<br>**Purity** 99% | (Lot STBG8884) | 2,008.0 µg/mL | +/- 11.7841 µg/mL<br>+/- 90.4557 µg/mL<br>+/- 100.3688 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 4 | Acenaphthylene<br>**CAS #** 208-96-8<br>**Purity** 95% | (Lot N19U) | 2,002.6 µg/mL | +/- 11.7524 µg/mL<br>+/- 90.2125 µg/mL<br>+/- 100.0989 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 5 | Acenaphthene<br>**CAS #** 83-32-9<br>**Purity** 99% | (Lot MKCN0610) | 2,000.0 µg/mL | +/- 11.7371 µg/mL<br>+/- 90.0953 µg/mL<br>+/- 99.9689 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 6 | Fluorene<br>**CAS #** 86-73-7<br>**Purity** 99% | (Lot 10217947) | 2,016.0 µg/mL | +/- 11.8310 µg/mL<br>+/- 90.8161 µg/mL<br>+/- 100.7687 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 7 | Phenanthrene<br>**CAS #** 85-01-8<br>**Purity** 99% | (Lot MKCL7390) | 2,012.0 µg/mL | +/- 11.8075 µg/mL<br>+/- 90.6359 µg/mL<br>+/- 100.5688 µg/mL | Gravimetric<br>Unstressed<br>Stressed |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 8 | Anthracene | | 2,002.0 | µg/mL | +/- | 11.7489 | µg/mL | Gravimetric |
| | **CAS #** 120-12-7 | (Lot MKCM0015) | | | +/- | 90.1854 | µg/mL | Unstressed |
| | **Purity** 99% | | | | +/- | 100.0689 | µg/mL | Stressed |
| 9 | Fluoranthene | | 2,003.0 | µg/mL | +/- | 11.7547 | µg/mL | Gravimetric |
| | **CAS #** 206-44-0 | (Lot MKCF7378) | | | +/- | 90.2305 | µg/mL | Unstressed |
| | **Purity** 99% | | | | +/- | 100.1189 | µg/mL | Stressed |
| 10 | Pyrene | | 2,011.0 | µg/mL | +/- | 11.8017 | µg/mL | Gravimetric |
| | **CAS #** 129-00-0 | (Lot BCCB9880) | | | +/- | 90.5909 | µg/mL | Unstressed |
| | **Purity** 99% | | | | +/- | 100.5188 | µg/mL | Stressed |
| 11 | Benz(a)anthracene | | 2,011.0 | µg/mL | +/- | 11.8014 | µg/mL | Gravimetric |
| | **CAS #** 56-55-3 | (Lot P0022018-0505) | | | +/- | 90.5890 | µg/mL | Unstressed |
| | **Purity** 98% | | | | +/- | 100.5168 | µg/mL | Stressed |
| 12 | Chrysene | | 2,000.0 | µg/mL | +/- | 11.7371 | µg/mL | Gravimetric |
| | **CAS #** 218-01-9 | (Lot STBJ8094) | | | +/- | 90.0953 | µg/mL | Unstressed |
| | **Purity** 99% | | | | +/- | 99.9689 | µg/mL | Stressed |
| 13 | Benzo(b)fluoranthene | | 2,006.0 | µg/mL | +/- | 11.7721 | µg/mL | Gravimetric |
| | **CAS #** 205-99-2 | (Lot 012012B) | | | +/- | 90.3638 | µg/mL | Unstressed |
| | **Purity** 97% | | | | +/- | 100.2669 | µg/mL | Stressed |
| 14 | Benzo(k)fluoranthene | | 2,010.0 | µg/mL | +/- | 11.7958 | µg/mL | Gravimetric |
| | **CAS #** 207-08-9 | (Lot 012019K) | | | +/- | 90.5458 | µg/mL | Unstressed |
| | **Purity** 99% | | | | +/- | 100.4688 | µg/mL | Stressed |
| 15 | Benzo(a)pyrene | | 2,004.0 | µg/mL | +/- | 11.7606 | µg/mL | Gravimetric |
| | **CAS #** 50-32-8 | (Lot RP210113) | | | +/- | 90.2755 | µg/mL | Unstressed |
| | **Purity** 99% | | | | +/- | 100.1689 | µg/mL | Stressed |
| 16 | Indeno(1,2,3-cd)pyrene | | 2,010.0 | µg/mL | +/- | 11.7958 | µg/mL | Gravimetric |
| | **CAS #** 193-39-5 | (Lot 1-RAK-33-4) | | | +/- | 90.5458 | µg/mL | Unstressed |
| | **Purity** 99% | | | | +/- | 100.4688 | µg/mL | Stressed |
| 17 | Dibenz(a,h)anthracene | | 2,017.0 | µg/mL | +/- | 11.8369 | µg/mL | Gravimetric |
| | **CAS #** 53-70-3 | (Lot ER032211-01) | | | +/- | 90.8611 | µg/mL | Unstressed |
| | **Purity** 99% | | | | +/- | 100.8187 | µg/mL | Stressed |
| 18 | Benzo(g,h,i)perylene | | 2,003.0 | µg/mL | +/- | 11.7547 | µg/mL | Gravimetric |
| | **CAS #** 191-24-2 | (Lot 8GFYJ) | | | +/- | 90.2305 | µg/mL | Unstressed |
| | **Purity** 99% | | | | +/- | 100.1189 | µg/mL | Stressed |

**Solvent:** Methylene chloride
**CAS #** 75-09-2
**Purity** 99%

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

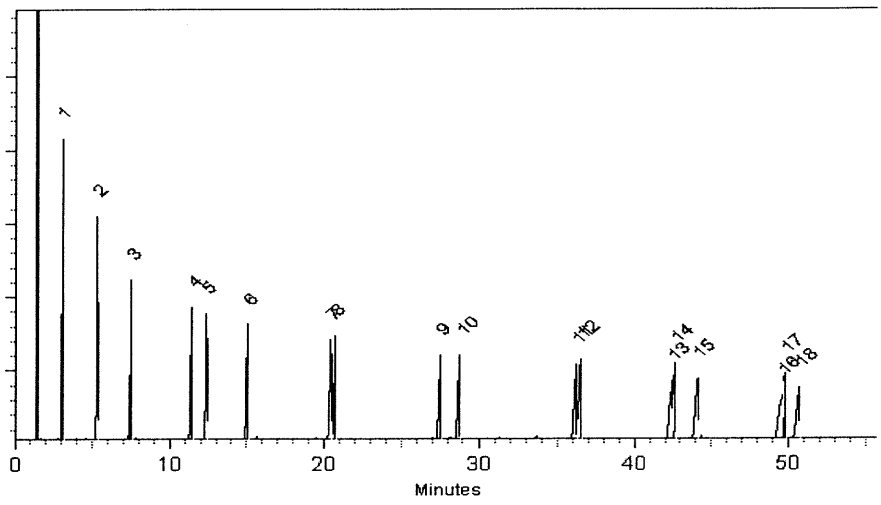
**Carrier Gas:**
hydrogen-constant pressure 10 psi.

**Temp. Program:**
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 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.

Lane Kibe - Mix Technician

**Date Mixed:** 14-May-2021 **Balance:** B345965662

Alexis Shelow - Operations Tech I

**Date Passed:** 18-May-2021

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

**General Certified Reference Material Notes**

**Expiration Notes:**

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

**Purity Notes:**

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

**Certified Uncertainty Value Notes:**

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

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

  $k$ is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

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

Sand
Purified
Washed and Ignited

avantor™ | J.T.Baker®

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

# Certificate of Analysis

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

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

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

E 2865

James T Ethier
Jamie Ethier
Vice President Global Quality

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

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

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

# CERTIFICATE OF ANALYSIS

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

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

COMMENTS

QC: PhC Irma Belmares

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

RG-02-01, Ed. 3

Recd. by RI on 7/24/23 E3551


Cleanert EPH
5g/25ml 15/pkg
固相萃取产品
LOT#:Z0513CK1
MFG#:F04005
Made in China
CAT# SI500025-30
Agela Technologies
E3757

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

avantor™ | J.T.Baker

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

# Certificate of Analysis

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

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

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

E 3828

JCroak
Jamie Croak
Director Quality Operations, Bioscience Production

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

Acetone
BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis

avantor™ | J.T.Baker

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

# Certificate of Analysis

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

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

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

Recd by RP on 12/13/24

E 3846

JCroak
Jamie Croak
Director Quality Operations, Bioscience Production

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

Acetone
BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis

avantor™ | J.T.Baker

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

# Certificate of Analysis

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

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

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

Recd. by RP on 2/12/25

E 3876

JCroak
Jamie Croak
Director Quality Operations, Bioscience Production

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

Avantor Performance Materials LLC

# Certificate of Analysis

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120633

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

| | | | |
|---|---|---|---|
| Catalog Number | H303 | Quality Test / Release Date | 11/07/2024 |
| Lot Number | 243570 | | |
| Description | HEXANES - OPTIMA | | |
| Country of Origin | United States | Suggested Retest Date | Nov/2029 |
| Chemical Origin | Organic - non animal | | |
| BSE/TSE Comment | No animal products are used as starting raw material ingredients, or used in processing, including lubricants, processing aids, or any other material that might migrate to the finished product. | | |

N/A

| Result Name | Units | Specifications | Test Value |
|---|---|---|---|
| APPEARANCE | | REPORT | Clear, colorless liquid |
| ASSAY (N-HEXANE) | % | >= 60 | 69 |
| ASSAY (SUM C6 HYDROCARBONS) | % | >= 99.9 | >99.9 |
| COLOR | APHA | <= 5 | <5 |
| DENSITY AT 25 DEGREES C | GM/ML | Inclusive Between 0.653 - 0.673 | 0.669 |
| EVAPORATION RESIDUE | ppm | <= 1 | <1 |
| FLUORESCENCE BACKGROUND | ppb | <= 1 | <1 |
| IDENTIFICATION | PASS/FAIL | = PASS TEST | PASS TEST |
| OPTICAL ABS AT 195 NM | ABS. UNITS | <= 1 | 0.74 |
| OPTICAL ABS AT 210 NM | ABS. UNITS | <= 0.25 | 0.17 |
| OPTICAL ABS AT 220 NM | ABS. UNITS | <= 0.07 | 0.05 |
| OPTICAL ABS AT 254 NM | ABS. UNITS | <= 0.005 | 0.001 |
| PESTICIDE RESIDUE ANALYSIS | NG/L | <= 10 | <10 |
| REFRACTIVE INDEX @ 25 DEG C | | Inclusive Between 1.375 - 1.385 | 1.379 |
| SUITABILITY FOR GC/MS | | = PASS TEST | PASS TEST |
| SULFUR COMPOUNDS | % | <= 0.005 | <0.005 |
| THIOPHENE | PASS/FAIL | = PASS TEST | PASS TEST |
| WATER (H2O) | % | <= 0.01 | <0.01 |
| WATER-SOLUBLE TITRABLE ACID | MEQ/G | <= 0.0003 | 0.0001 |

Recd by RP on 2/12/25
E3877

Harout Sahagian - Quality Control Manager - Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.
*Based on suggested storage condition.

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

avantor | J.T.Baker

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

# Certificate of Analysis

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

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

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

E 3878

JCroak
Jamie Croak
Director Quality Operations, Bioscience Production

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

Hydrochloric Acid, 36.5-38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

R → 10/13/24
Met dig

M 6121

Material No.: 9530-33
Batch No.: 0000275677
Manufactured Date: 2020/12/16
Retest Date: 2025/12/15
Revision No: 1

# Certificate of Analysis

| Test | Specification | Result |
|---|---|---|
| ACS - Assay (as HCl) (by acid-base titrn) | 36.5 - 38.0 % | 37.6 |
| ACS - Color (APHA) | <= 10 | 5 |
| ACS - Residue after Ignition | <= 3 ppm | 1 |
| ACS - Specific Gravity at 60°/60°F | 1.185 - 1.192 | 1.190 |
| ACS - Bromide (Br) | <= 0.005 % | < 0.005 |
| ACS - Extractable Organic Substances | <= 5 ppm | 1 |
| ACS - Free Chlorine (as $Cl_2$) | <= 0.5 ppm | < 0.5 |
| Phosphate ($PO_4$) | <= 0.05 ppm | < 0.03 |
| Sulfate ($SO_4$) | <= 0.5 ppm | < 0.3 |
| Sulfite ($SO_3$) | <= 0.8 ppm | 0.3 |
| Ammonium ($NH_4$) | <= 3 ppm | < 1 |
| Trace Impurities - Arsenic (As) | <= 0.010 ppm | < 0.003 |
| Trace Impurities - Aluminum (Al) | <= 10.0 ppb | < 0.2 |
| Arsenic and Antimony (as As) | <= 5 ppb | < 3 |
| Trace Impurities - Barium (Ba) | <= 1.0 ppb | < 0.2 |
| Trace Impurities - Beryllium (Be) | <= 1.0 ppb | < 0.2 |
| Trace Impurities - Bismuth (Bi) | <= 10.0 ppb | < 1.0 |
| Trace Impurities - Boron (B) | <= 20.0 ppb | < 5.0 |
| Trace Impurities - Cadmium (Cd) | <= 1.0 ppb | < 0.3 |
| Trace Impurities - Calcium (Ca) | <= 50.0 ppb | 29.7 |
| Trace Impurities - Chromium (Cr) | <= 1.0 ppb | < 0.4 |
| Trace Impurities - Cobalt (Co) | <= 1.0 ppb | < 0.3 |
| Trace Impurities - Copper (Cu) | <= 1.0 ppb | < 0.1 |
| Trace Impurities - Gallium (Ga) | <= 1.0 ppb | < 0.2 |

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

Material No.: 9530-33
Batch No.: 0000275677

| Test | Specification | Result |
|---|---|---|
| Trace Impurities - Germanium (Ge) | <= 3.0 ppb | < 2.0 |
| Trace Impurities - Gold (Au) | <= 4.0 ppb | < 0.2 |
| Heavy Metals (as Pb) | <= 100 ppb | < 50 |
| Trace Impurities - Iron (Fe) | <= 15.0 ppb | <1 |
| Trace Impurities - Lead (Pb) | <= 1.0 ppb | < 0.5 |
| Trace Impurities - Lithium (Li) | <= 1.0 ppb | 0.2 |
| Trace Impurities - Magnesium (Mg) | <= 10.0 ppb | 0.4 |
| Trace Impurities - Manganese (Mn) | <= 1.0 ppb | < 0.4 |
| Trace Impurities - Mercury (Hg) | <= 0.5 ppb | 0.1 |
| Trace Impurities - Molybdenum (Mo) | <= 10.0 ppb | < 5.0 |
| Trace Impurities - Nickel (Ni) | <= 4.0 ppb | < 0.3 |
| Trace Impurities - Niobium (Nb) | <= 1.0 ppb | < 0.2 |
| Trace Impurities - Potassium (K) | <= 9.0 ppb | < 2.0 |
| Trace Impurities - Selenium (Se), For Information Only | ppb | 1.0 |
| Trace Impurities - Silicon (Si) | <= 100.0 ppb | < 10.0 |
| Trace Impurities - Silver (Ag) | <= 1.0 ppb | < 0.3 |
| Trace Impurities - Sodium (Na) | <= 100.0 ppb | < 5.0 |
| Trace Impurities - Strontium (Sr) | <= 1.0 ppb | < 0.2 |
| Trace Impurities - Tantalum (Ta) | <= 1.0 ppb | < 0.9 |
| Trace Impurities - Thallium (Tl) | <= 5.0 ppb | < 2.0 |
| Trace Impurities - Tin (Sn) | <= 5.0 ppb | < 0.8 |
| Trace Impurities - Titanium (Ti) | <= 1.0 ppb | 0.2 |
| Trace Impurities - Vanadium (V) | <= 1.0 ppb | < 0.2 |
| Trace Impurities - Zinc (Zn) | <= 5.0 ppb | 0.3 |
| Trace Impurities - Zirconium (Zr) | <= 1.0 ppb | < 0.1 |

For Laboratory, Research or Manufacturing Use
Product Information (not specifications):
Appearance (clear, fuming liquid)
Meets ACS Specifications

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

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

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

***Certified Reference Material CRM***

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

## CERTIFIED WEIGHT REPORT

**Part Number:** 95709
Lot Number: 060420
Description: NJ EPH Aromatic Hydrocarbons
18 components
Expiration Date: 060425
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 2000
NIST Test ID#: 23060

**Solvent(s):** **Lot#**
Methylene chloride 104929

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

| | | |
|---|---|---|
| Formulated By: | Benson Chan | 060420 DATE |
| Reviewed By: | Pedro L. Rentas | 060420 DATE |

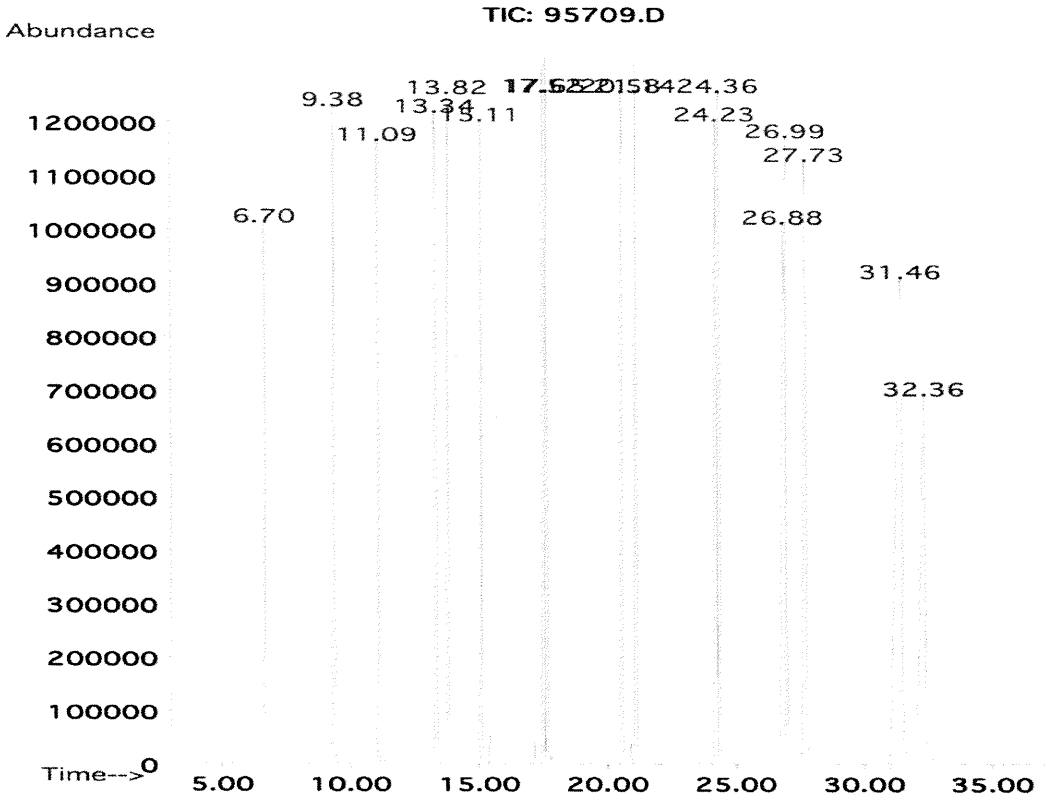
| Compound | RM# | Lot Number | Nominal Conc (µg/mL) | Purity (%) | Uncertainty Purity | Target Weight(g) | Actual Weight(g) | Actual Conc (µg/mL) | Expanded Uncertainty (+/-) (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Acenaphthene | 1 | MKBJ4871V | 2000 | 99 | 0.2 | 1.01003 | 1.01010 | 2000.1 | 8.1 | 83-32-9 | N/A | ipr-rat 600mg/kg |
| 2. Acenaphthylene | 3 | 012014 | 2000 | 98 | 0.2 | 1.02033 | 1.02053 | 2000.4 | 8.2 | 208-96-8 | N/A | N/A |
| 3. Anthracene | 13 | A0210580 | 2000 | 99 | 0.2 | 1.01003 | 1.01009 | 2000.1 | 8.1 | 120-12-7 | 0.2mg/m3 (8H) | ipr-mus 430mg/kg |
| 4. Benzo(a)anthracene | 28 | JY2TD-JT | 2000 | 98 | 0.2 | 1.02033 | 1.02051 | 2000.3 | 8.2 | 56-55-3 | N/A | N/A |
| 5. Benzo(a)pyrene | 30 | 012012 | 2000 | 99.5 | 0.2 | 1.00495 | 1.00511 | 2000.3 | 8.1 | 50-32-8 | 0.2mg/m3 (8H) | scu-rat 50mg/kg |
| 6. Benzo(b)fluoranthene | 31 | 012012b | 2000 | 99 | 0.2 | 1.01003 | 1.01012 | 2000.2 | 8.1 | 205-99-2 | N/A | N/A |
| 7. Benzo(k)fluoranthene | 33 | 012012k | 2000 | 99 | 0.2 | 1.01003 | 1.01018 | 2000.3 | 8.1 | 207-08-9 | N/A | N/A |
| 8. Benzo(g,h,i)perylene | 32 | 012018 | 2000 | 99 | 0.2 | 1.01003 | 1.01019 | 2000.3 | 8.1 | 191-24-2 | N/A | N/A |
| 9. Chrysene | 91 | 012015 | 2000 | 98 | 0.2 | 1.02033 | 1.02040 | 2000.1 | 8.2 | 218-01-9 | 0.2mg/m3 | N/A |
| 10. Dibenzo(a,h)anthracene | 112 | 012011 | 2000 | 98 | 0.2 | 1.02033 | 1.02050 | 2000.3 | 8.2 | 53-70-3 | 0.2mg/m3 | N/A |
| 11. Fluoranthene | 183 | 04221PV | 2000 | 98 | 0.2 | 1.02033 | 1.02050 | 2000.3 | 8.2 | 206-44-0 | N/A | orl-rat 2000mg/kg |
| 12. Fluorene | 184 | 07211MV | 2000 | 98 | 0.2 | 1.02033 | 1.02047 | 2000.3 | 8.2 | 86-73-7 | N/A | ipr-mus 2 g/kg |
| 13. Indeno(1,2,3-cd)pyrene | 202 | 012014 | 2000 | 99.9 | 0.2 | 1.00093 | 1.00119 | 2000.5 | 8.0 | 193-39-5 | N/A | N/A |
| 14. 2-Methylnaphthalene | 214 | MKBF3783V | 2000 | 97 | 0.2 | 1.03085 | 1.03090 | 2000.1 | 8.3 | 91-57-6 | N/A | orl-rat 1630mg/kg |
| 15. Naphthalene | 222 | MKBZ8680V | 2000 | 100 | 0.2 | 0.99993 | 0.99999 | 2000.1 | 8.0 | 91-20-3 | 10 ppm (50mg/m3/8H) | orl-rat 490mg/kg |
| 16. Phenanthrene | 248 | 03410PV | 2000 | 99 | 0.2 | 1.01003 | 1.01030 | 2000.5 | 8.1 | 85-01-8 | 0.2mg/m3/8H | orl-mus 700mg/kg |
| 17. Pyrene | 259 | 010197 | 2000 | 98 | 0.2 | 1.02033 | 1.02042 | 2000.2 | 8.2 | 129-00-0 | 0.2mg/m3/8H | orl-rat 2700mg/kg |
| 18. 1,2,3-Trimethylbenzene | 944 | 031097 | 2000 | 99 | 0.2 | 1.01003 | 1.01025 | 2000.4 | 8.1 | 526-73-8 | N/A | N/A |

P11137
&
P11141

AR 11/02/21

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

**Method GC8MSD-2.M:** Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (14min.), Rate = 10°C/min., Injector B= 250°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Melissa Stonier.




| Peak No. | Name | MSD RT (min.) |
|---|---|---|
| 1 | 1,2,3-Trimethylbenzene | 6.70 |
| 2 | Naphthalene | 9.38 |
| 3 | 2-Methylnaphthalene | 11.09 |
| 4 | Acenaphthylene | 13.34 |
| 5 | Acenaphthene | 13.82 |
| 6 | Fluorene | 15.11 |
| 7 | Phenanthrene | 17.52 |
| 8 | Anthracene | 17.65 |
| 9 | Fluoranthene | 20.58 |
| 10 | Pyrene | 21.14 |
| 11 | Chrysene | 24.23 |
| 12 | Benzo(a)anthracene | 24.36 |
| 13 | Benzo(b)fluoranthene/Benzo(k)fluoranthene | 26.98 |
| 14 | Benzo(a)pyrene | 27.73 |
| 15 | Indeno(1,2,3-cd)pyrene/Dibenzo(a,h)anthracene | 31.46 |
| 16 | Benzo(g,h,i)perylene | 32.36 |

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

www.restek.com

# CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

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

P12361 ↓ P12370 Y.P. 03/16/23

**Catalog No. :** 30540 **Lot No.:** A0190424

**Description :** NJEPH Aliphatics Calibration Standard

Aliphatics Calibration Standard 2000µg/mL, Hexane/Carbon Disulfide (80:20), 1mL/ampul

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

**Expiration Date :** November 30, 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-Nonane (C9)<br>**CAS #** 111-84-2 (Lot SHBN5361)<br>**Purity** 99% | 2,014.0 µg/mL | +/- 11.8193 µg/mL<br>+/- 50.0027 µg/mL<br>+/- 59.9491 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 2 | n-Decane (C10)<br>**CAS #** 124-18-5 (Lot SHBN8619)<br>**Purity** 99% | 2,014.7 µg/mL | +/- 11.8232 µg/mL<br>+/- 50.0193 µg/mL<br>+/- 59.9689 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 3 | Naphthalene<br>**CAS #** 91-20-3 (Lot MKCH0219)<br>**Purity** 99% | 2,015.3 µg/mL | +/- 11.8271 µg/mL<br>+/- 50.0358 µg/mL<br>+/- 59.9888 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 4 | n-Dodecane (C12)<br>**CAS #** 112-40-3 (Lot SHBN7174)<br>**Purity** 99% | 2,008.0 µg/mL | +/- 11.7841 µg/mL<br>+/- 49.8538 µg/mL<br>+/- 59.7705 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 5 | 2-Methylnaphthalene<br>**CAS #** 91-57-6 (Lot STBK0259)<br>**Purity** 96% | 2,007.0 µg/mL | +/- 11.7784 µg/mL<br>+/- 49.8299 µg/mL<br>+/- 59.7419 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 6 | n-Tetradecane (C14)<br>**CAS #** 629-59-4 (Lot STBK2282)<br>**Purity** 99% | 2,016.7 µg/mL | +/- 11.8349 µg/mL<br>+/- 50.0689 µg/mL<br>+/- 60.0284 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 7 | n-Hexadecane (C16)<br>**CAS #** 544-76-3 (Lot SHBM4146)<br>**Purity** 98% | 2,014.9 µg/mL | +/- 11.8244 µg/mL<br>+/- 50.0246 µg/mL<br>+/- 59.9753 µg/mL | Gravimetric<br>Unstressed<br>Stressed |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 8 | n-Octadecane (C18)<br>**CAS #** 593-45-3<br>**Purity** 97% | (Lot VZKOJ) | 2,004.7 | µg/mL | +/- 11.7645<br>+/- 49.7710<br>+/- 59.6712 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 9 | n-Eicosane (C20)<br>**CAS #** 112-95-8<br>**Purity** 99% | (Lot MKCF7888) | 2,018.0 | µg/mL | +/- 11.8428<br>+/- 50.1020<br>+/- 60.0681 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 10 | n-Heneicosane (C21)<br>**CAS #** 629-94-7<br>**Purity** 99% | (Lot MKCL3226) | 2,000.7 | µg/mL | +/- 11.7410<br>+/- 49.6717<br>+/- 59.5522 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 11 | n-Docosane (C22)<br>**CAS #** 629-97-0<br>**Purity** 99% | (Lot MKCL8918) | 2,005.3 | µg/mL | +/- 11.7684<br>+/- 49.7876<br>+/- 59.6911 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 12 | n-Tetracosane (C24)<br>**CAS #** 646-31-1<br>**Purity** 99% | (Lot MKCN2863) | 2,018.0 | µg/mL | +/- 11.8428<br>+/- 50.1020<br>+/- 60.0681 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 13 | n-Hexacosane (C26)<br>**CAS #** 630-01-3<br>**Purity** 99% | (Lot MKCD4540) | 2,014.0 | µg/mL | +/- 11.8193<br>+/- 50.0027<br>+/- 59.9491 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 14 | n-Octacosane (C28)<br>**CAS #** 630-02-4<br>**Purity** 99% | (Lot BCCG0084) | 2,002.0 | µg/mL | +/- 11.7489<br>+/- 49.7048<br>+/- 59.5919 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 15 | n-Triacontane (C30)<br>**CAS #** 638-68-6<br>**Purity** 97% | (Lot MKCQ9436) | 2,011.1 | µg/mL | +/- 11.8025<br>+/- 49.9316<br>+/- 59.8637 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 16 | n-Dotriacontane (C32)<br>**CAS #** 544-85-4<br>**Purity** 99% | (Lot BCBW0661) | 2,012.0 | µg/mL | +/- 11.8075<br>+/- 49.9531<br>+/- 59.8895 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 17 | n-Tetratriacontane (C34)<br>**CAS #** 14167-59-0<br>**Purity** 99% | (Lot OML4N) | 2,006.7 | µg/mL | +/- 11.7762<br>+/- 49.8207<br>+/- 59.7308 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 18 | n-Hexatriacontane (C36)<br>**CAS #** 630-06-8<br>**Purity** 99% | (Lot Z27H018) | 2,017.3 | µg/mL | +/- 11.8388<br>+/- 50.0855<br>+/- 60.0483 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 19 | n-Octatriacontane (C38)<br>**CAS #** 7194-85-6<br>**Purity** 96% | (Lot 0000145137) | 2,017.3 | µg/mL | +/- 11.8385<br>+/- 50.0842<br>+/- 60.0467 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 20 | n-Tetracontane (C40)<br>**CAS #** 4181-95-7<br>**Purity** 99% | (Lot BSBME) | 2,008.7 | µg/mL | +/- 11.7880<br>+/- 49.8703<br>+/- 59.7903 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |

**Solvent:** Hexane/Carbon disulfide (80:20)
**CAS #** 110-54-3/75-15-0
**Purity** 99%

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

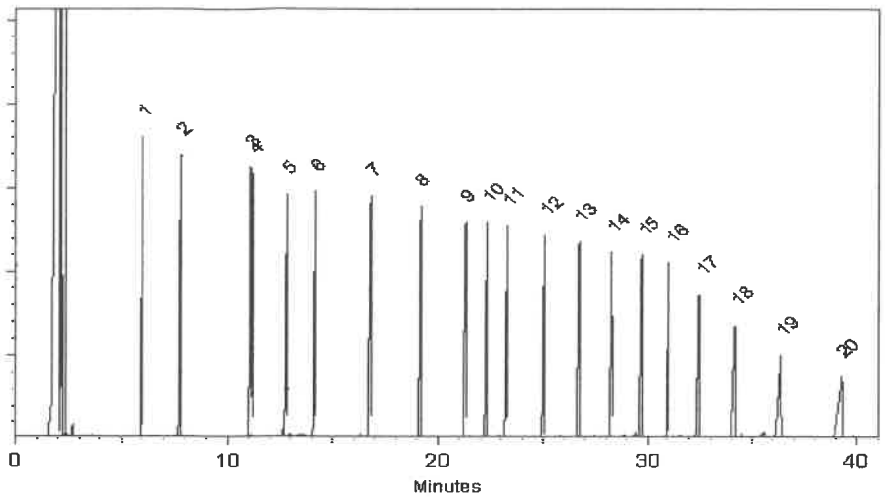
**Carrier Gas:**
hydrogen-constant pressure 10 psi.

**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.

Morgan Craighead - Mix Technician

**Date Mixed:** 10-Oct-2022 **Balance:** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

**Date Passed:** 20-Oct-2022

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

**General Certified Reference Material Notes**

**Expiration Notes:**

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

**Purity Notes:**

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

**Certified Uncertainty Value Notes:**

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

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

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

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

| Label Conditions | Standard Conditions | Non-Standard Conditions |
|---|---|---|
| 25°C Nominal (Room Temperature) | < 60°C | ≥ 60°C up to 7 days |
| 10°C or colder (Refrigerate) | < 40°C | ≥ 40°C up to 7 days |
| 0°C or colder (Freezer)<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.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

**Manufacturing Notes:**

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

**Handling Notes:**

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

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

www.restek.com

## CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

***chromatographic plus***

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

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

P12960 & P12991 Y.P. 12/21/2023

**Catalog No. :** 31098 **Lot No.:** A0204989

**Description :** 1-Chlorooctadecane Standard

1-Chlorooctadecane Standard 10,000µg/mL, Methylene Chloride, 1mL/ampul

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

**Expiration Date :** January 31, 2031 **Storage:** 10°C or colder

**Ship:** Ambient

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | 1-Chlorooctadecane | 3386-33-2 | 14738400 | 99% | 10,097.3 µg/mL | +/- 567.2675 |

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

**Solvent:** Methylene chloride
**CAS #** 75-09-2
**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:**
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

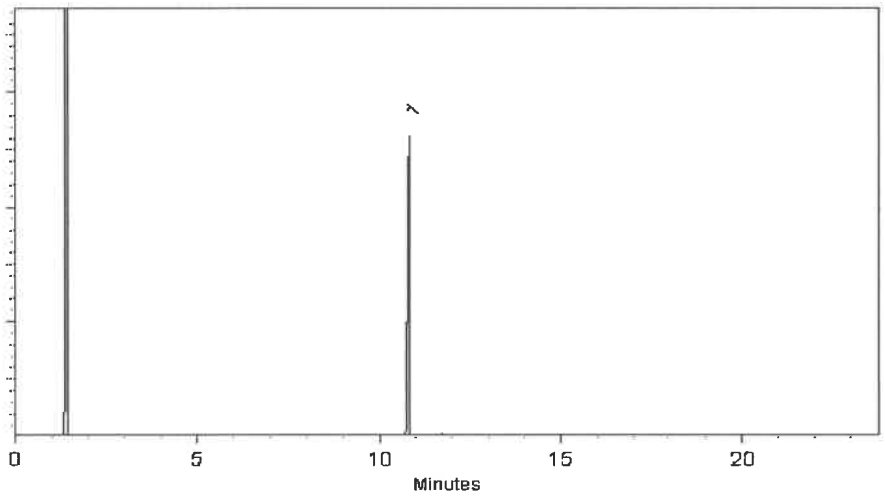
**Inj. Temp:**
250°C

**Det. Temp:**
330°C

**Det. Type:**
FID

**Split Vent:**
10 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.

Peter Robbins - Operations Technician I

**Date Mixed:** 02-Dec-2023 **Balance Serial #** B345965662

Christie Mills - Operations Lead Tech - ARM QC

**Date Passed:** 08-Dec-2023

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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

### Certified Uncertainty Value Notes:

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

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

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

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

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

### Handling Notes:

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

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

www.restek.com

## CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

***chromatographic plus***

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

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

P12960 & P12991 Y.P. 12/21/2023

**Catalog No. :** 31098 **Lot No.:** A0204989

**Description :** 1-Chlorooctadecane Standard

1-Chlorooctadecane Standard 10,000µg/mL, Methylene Chloride, 1mL/ampul

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

**Expiration Date :** January 31, 2031 **Storage:** 10°C or colder

**Ship:** Ambient

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | 1-Chlorooctadecane | 3386-33-2 | 14738400 | 99% | 10,097.3 µg/mL | +/- 567.2675 |

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

**Solvent:** Methylene chloride
**CAS #** 75-09-2
**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:**
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

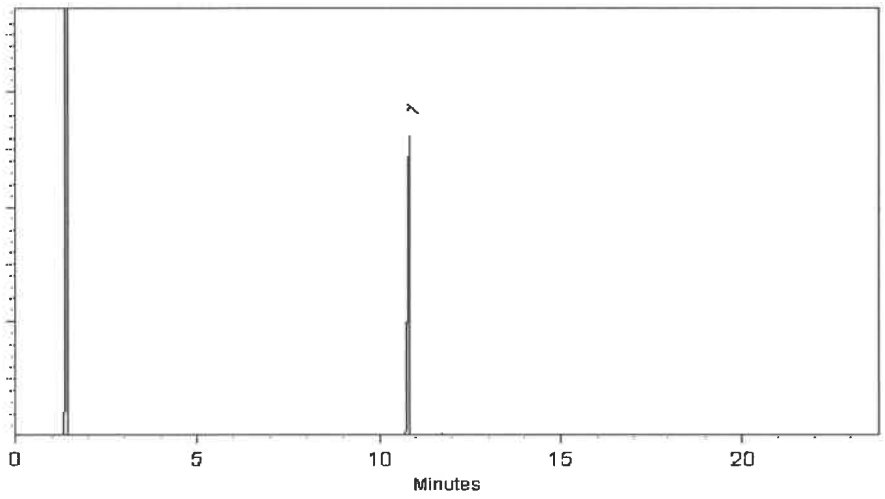
**Inj. Temp:**
250°C

**Det. Temp:**
330°C

**Det. Type:**
FID

**Split Vent:**
10 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.

Peter Robbins - Operations Technician I

**Date Mixed:** 02-Dec-2023 **Balance Serial #** B345965662

Christie Mills - Operations Lead Tech - ARM QC

**Date Passed:** 08-Dec-2023

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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

### Certified Uncertainty Value Notes:

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

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

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

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

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

### Handling Notes:

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

CERTIFIED WEIGHT REPORT

Part Number: 95899
Lot Number: 040524
Description: NJ EPH Aliphatic n-Hydrocarbons - Revised
20 components
Expiration Date: 040534
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 6UTB

| Solvent(s): | Lot# |
|---|---|
| Cyclohexane | 28930 |

P13278
&
P13287
Y.P.
04111124

| | | |
|---|---|---|
| Formulated By: | Anthony Mahoney | 040524 DATE |
| Reviewed By: | Pedro L. Rentas | 040524 DATE |

5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 25.0 0.001 Flask Uncertainty
**CAUTION: Sonicate Before Use**

| | Compound | (RM#) Part Number | Lot Number | Dil. Factor | Initial Vol. (mL) | Initial Conc.(ug/mL) | Nominal Conc (µg/mL) | Purity (%) | Purity Uncertainty | Uncertainty Pipette | 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. | 2-Methylnaphthalene | (0214) | MKBF3783V | NA | NA | NA | 1000 | 97 | 0.2 | NA | 0.02579 | 0.02594 | 1005.7 | 5.7 | 91-57-6 | N/A | orl-rat 1630mg/kg |
| 2. | Naphthalene | (0222) | MKBZ8680V | NA | NA | NA | 1000 | 100 | 0.2 | NA | 0.02502 | 0.02511 | 1003.7 | 5.7 | 91-20-3 | 10 ppm (50mg/m3/8H) | orl-rat 490mg/kg |
| 3. | n-Nonane | 95708 | 120222 | 1.00 | 25.00 | 1000.7 | 1000 | NA | NA | 0.013 | NA | NA | 1000.0 | 4.2 | 111-84-2 | 200 ppm (1050mg/m3/8H) | ivn-mus 218mg/kg |
| 4. | n-Decane | 95708 | **120222** | 1.00 | 25.00 | 1000.9 | 1000 | NA | NA | 0.013 | NA | NA | 1000.2 | 4.2 | 124-18-5 | N/A | N/A |
| 5. | n-Dodecane | 95708 | 120222 | 1.00 | 25.00 | 1000.7 | 1000 | NA | NA | 0.013 | NA | NA | 1000.0 | 4.2 | 112-40-3 | N/A | ivn-mus 3494mg/kg |
| 6. | n-Tetradecane | 95708 | 120222 | 1.00 | 25.00 | 1002.1 | 1000 | NA | NA | 0.013 | NA | NA | 1001.3 | 4.2 | 629-59-4 | N/A | N/A |
| 7. | n-Hexadecane | 95708 | 120222 | 1.00 | 25.00 | 1000.5 | 1000 | NA | NA | 0.013 | NA | NA | 999.7 | 4.2 | 544-76-3 | N/A | N/A |
| 8. | n-Octadecane | 95708 | 120222 | 1.00 | 25.00 | 1001.0 | 1000 | NA | NA | 0.013 | NA | NA | 1000.3 | 4.1 | 593-45-3 | N/A | N/A |
| 9. | n-Eicosane | 95708 | 120222 | 1.00 | 25.00 | 1001.0 | 1000 | NA | NA | 0.013 | NA | NA | 1000.3 | 4.2 | 112-95-8 | N/A | N/A |
| 10. | n-Heneicosane | 95708 | 120222 | 1.00 | 25.00 | 1002.4 | 1000 | NA | NA | 0.013 | NA | NA | 1001.6 | 4.2 | 629-94-7 | N/A | N/A |
| 11. | n-Docosane | 95708 | 120222 | 1.00 | 25.00 | 1001.9 | 1000 | NA | NA | 0.013 | NA | NA | 1001.2 | 4.2 | 629-97-0 | N/A | N/A |
| 12. | n-Tetracosane | 95708 | 120222 | 1.00 | 25.00 | 1000.8 | 1000 | NA | NA | 0.013 | NA | NA | 1000.1 | 4.2 | 646-31-1 | N/A | N/A |
| 13. | n-Hexacosane | 95708 | 120222 | 1.00 | 25.00 | 1001.2 | 1000 | NA | NA | 0.013 | NA | NA | 1000.4 | 4.2 | 630-01-3 | N/A | N/A |
| 14. | n-Octacosane | 95708 | 120222 | 1.00 | 25.00 | 1000.5 | 1000 | NA | NA | 0.013 | NA | NA | 999.8 | 4.2 | 630-02-4 | N/A | N/A |
| 15. | n-Triacontane | 95708 | 120222 | 1.00 | 25.00 | 1000.5 | 1000 | NA | NA | 0.013 | NA | NA | 999.8 | 4.2 | 638-68-6 | N/A | N/A |
| 16. | n-Dotriacontane | 95708 | 120222 | 1.00 | 25.00 | 1000.5 | 1000 | NA | NA | 0.013 | NA | NA | 999.8 | 4.3 | 544-85-4 | N/A | ivn-mus 100mg/kg |
| 17. | n-Tetratriacontane | 95708 | 120222 | 1.00 | 25.00 | 1000.4 | 1000 | NA | NA | 0.013 | NA | NA | 999.7 | 4.2 | 14167-59-0 | N/A | N/A |
| 18. | n-Hexatriacontane | 95708 | 120222 | 1.00 | 25.00 | 1001.5 | 1000 | NA | NA | 0.013 | NA | NA | 1000.8 | 4.2 | 630-06-8 | N/A | N/A |
| 19. | n-Octatriacontane | 95708 | 120222 | 1.00 | 25.00 | 1000.3 | 1000 | NA | NA | 0.013 | NA | NA | 999.6 | 4.3 | 7194-85-6 | N/A | N/A |
| 20. | n-Tetracontane | 95708 | 120222 | 1.00 | 25.00 | 1000.6 | 1000 | NA | NA | 0.013 | NA | NA | 999.9 | 4.3 | 4181-95-7 | N/A | N/A |

- 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).

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CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

*chromatographic plus*

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

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

**Catalog No. :** 31480 **Lot No.:** A0210831

**Description :** MA Fractionation Surrogate Spike Mix

MA Fractionation Surrogate Spike Mix 4000µg/mL, Hexane, 1mL/ampul

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

**Expiration Date :** March 31, 2030 **Storage:** 10°C or colder

**Handling:** Sonication required. Mix is photosensitive. **Ship:** Ambient

P13457 → P13476 Y.P. 07/23/24

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | 2-Fluorobiphenyl | 321-60-8 | 00021384 | 99% | 4,031.0 µg/mL | +/- 181.5871 |
| 2 | 2-Bromonaphthalene | 580-13-2 | STBC5362V | 99% | 4,037.5 µg/mL | +/- 181.8799 |

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

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

# Quality Confirmation Test

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

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

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

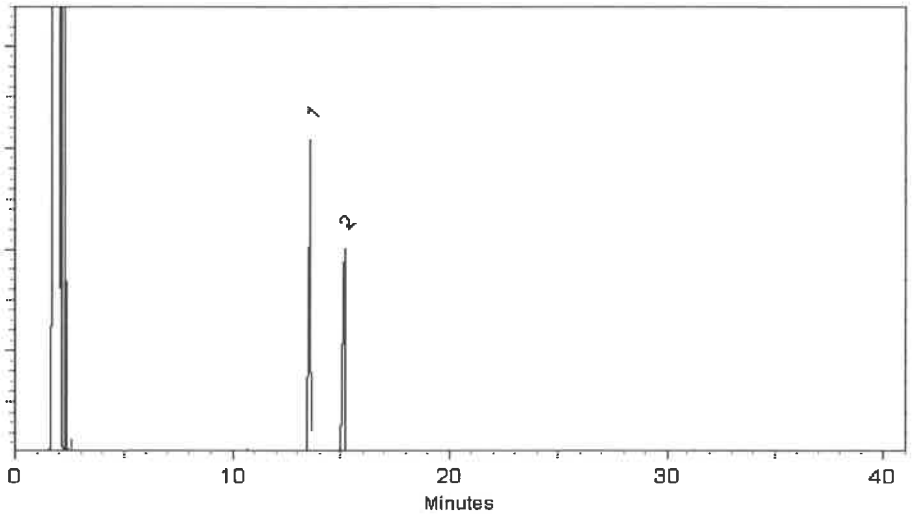
**Inj. Temp:**
250°C

**Det. Temp:**
330°C

**Det. Type:**
FID

**Split Vent:**
2 ml/min.

**Inj. Vol**
1µl




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

Stacey Wanner - Operations Technician I

**Date Mixed:** 29-Apr-2024 **Balance Serial #** B345965662

Dillan Murphy - Operations Technician I

**Date Passed:** 30-Apr-2024

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

# General Certified Reference Material Notes

## Expiration Notes:

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

## Purity Notes:

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

## Certified Uncertainty Value Notes:

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

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

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

## Manufacturing Notes:

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

## Handling Notes:

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

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CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

*chromatographic plus*

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

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

**Catalog No. :** 31480 **Lot No.:** A0210831

**Description :** MA Fractionation Surrogate Spike Mix

MA Fractionation Surrogate Spike Mix 4000µg/mL, Hexane, 1mL/ampul

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

**Expiration Date :** March 31, 2030 **Storage:** 10°C or colder

**Handling:** Sonication required. Mix is photosensitive. **Ship:** Ambient

P13457 ↓ P13476 Y.P. 07/23/24

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | 2-Fluorobiphenyl | 321-60-8 | 00021384 | 99% | 4,031.0 µg/mL | +/- 181.5871 |
| 2 | 2-Bromonaphthalene | 580-13-2 | STBC5362V | 99% | 4,037.5 µg/mL | +/- 181.8799 |

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

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

# Quality Confirmation Test

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

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

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

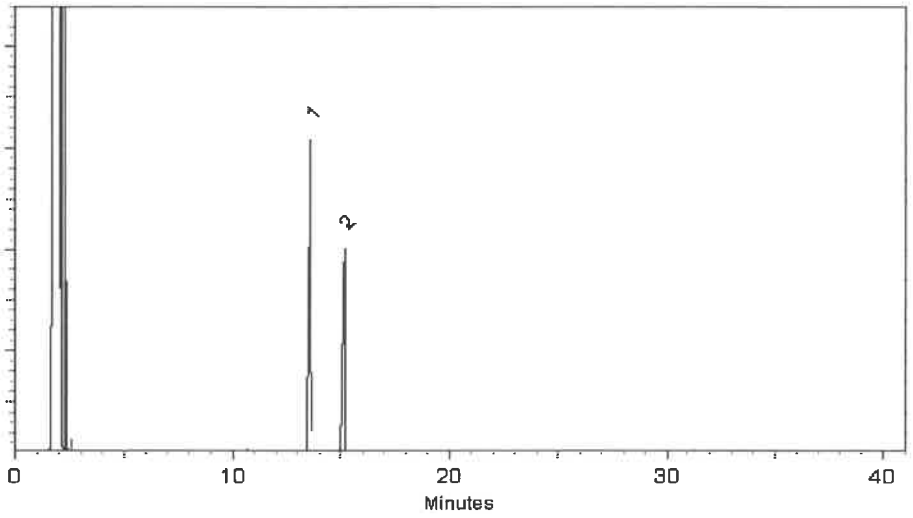
**Inj. Temp:**
250°C

**Det. Temp:**
330°C

**Det. Type:**
FID

**Split Vent:**
2 ml/min.

**Inj. Vol**
1µl




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

Stacey Wanner - Operations Technician I

**Date Mixed:** 29-Apr-2024 **Balance Serial #** B345965662

Dillan Murphy - Operations Technician I

**Date Passed:** 30-Apr-2024

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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

### Certified Uncertainty Value Notes:

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

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

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

### Manufacturing Notes:

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

### Handling Notes:

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

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CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

*chromatographic plus*

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

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

**Catalog No. :** 31098 **Lot No.:** A0213283

**Description :** 1-Chlorooctadecane Standard

1-Chlorooctadecane Standard 10,000µg/mL, Methylene Chloride, 1mL/ampul

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

**Expiration Date :** July 31, 2031 **Storage:** 10°C or colder

**Ship:** Ambient

P13595 ↓ P13624 } Y.P. 10/16/24

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | 1-Chlorooctadecane | 3386-33-2 | 15018900 | 99% | 10,058.0 µg/mL | +/- 565.0578 |

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

**Solvent:** Methylene chloride
**CAS #** 75-09-2
**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:**
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

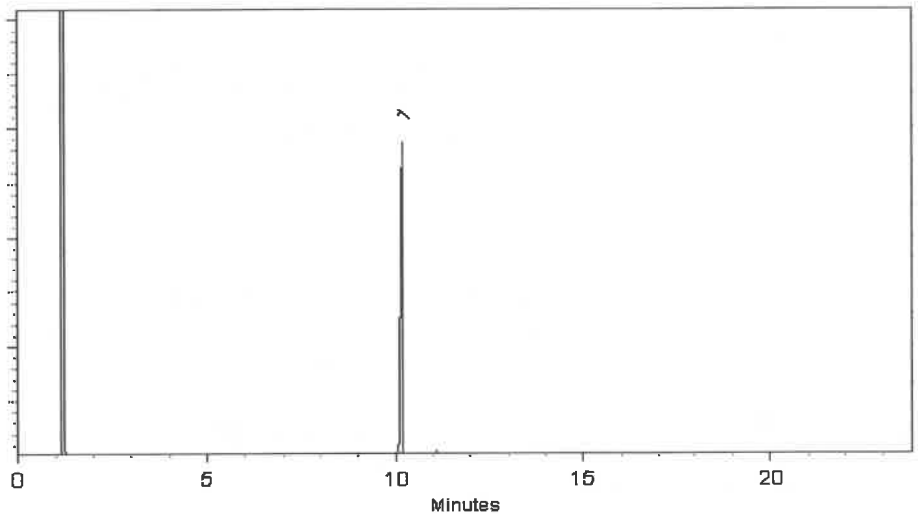
**Inj. Temp:**
250°C

**Det. Temp:**
330°C

**Det. Type:**
FID

**Split Vent:**
10 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.

Stacey Wanner - Operations Technician I

**Date Mixed:** 28-Jun-2024 **Balance Serial #** B345965662

Dillan Murphy - Operations Technician I

**Date Passed:** 01-Jul-2024

**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:

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- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

### Certified Uncertainty Value Notes:

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

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

### Manufacturing Notes:

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

### Handling Notes:

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CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

*chromatographic plus*

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

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

**Catalog No. :** 31098 **Lot No.:** A0213283

**Description :** 1-Chlorooctadecane Standard

1-Chlorooctadecane Standard 10,000µg/mL, Methylene Chloride, 1mL/ampul

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

**Expiration Date :** July 31, 2031 **Storage:** 10°C or colder

**Ship:** Ambient

P13595 ↓ P13624 Y.P. 10/16/24

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | 1-Chlorooctadecane | 3386-33-2 | 15018900 | 99% | 10,058.0 µg/mL | +/- 565.0578 |

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

**Solvent:** Methylene chloride
**CAS #** 75-09-2
**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:**
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

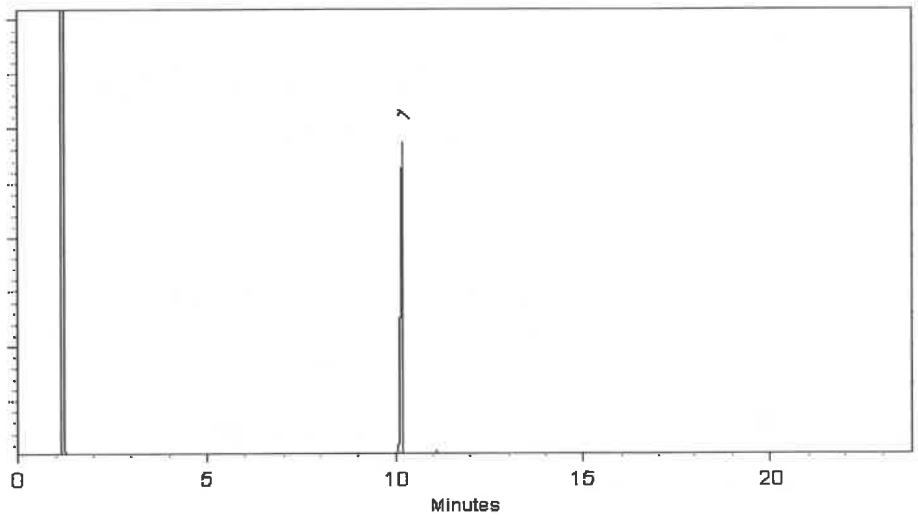
**Inj. Temp:**
250°C

**Det. Temp:**
330°C

**Det. Type:**
FID

**Split Vent:**
10 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.

Stacey Wanner - Operations Technician I

**Date Mixed:** 28-Jun-2024 **Balance Serial #** B345965662

Dillan Murphy - Operations Technician I

**Date Passed:** 01-Jul-2024

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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

### Certified Uncertainty Value Notes:

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

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

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

### Manufacturing Notes:

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

### Handling Notes:

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

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CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

*chromatographic plus*

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

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

**Catalog No. :** 31098 **Lot No.:** A0213283

**Description :** 1-Chlorooctadecane Standard

1-Chlorooctadecane Standard 10,000µg/mL, Methylene Chloride, 1mL/ampul

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

**Expiration Date :** July 31, 2031 **Storage:** 10°C or colder

**Ship:** Ambient

P13595 ↓ P13624 Y.P. 10/16/24

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | 1-Chlorooctadecane | 3386-33-2 | 15018900 | 99% | 10,058.0 µg/mL | +/- 565.0578 |

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

**Solvent:** Methylene chloride
**CAS #** 75-09-2
**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:**
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

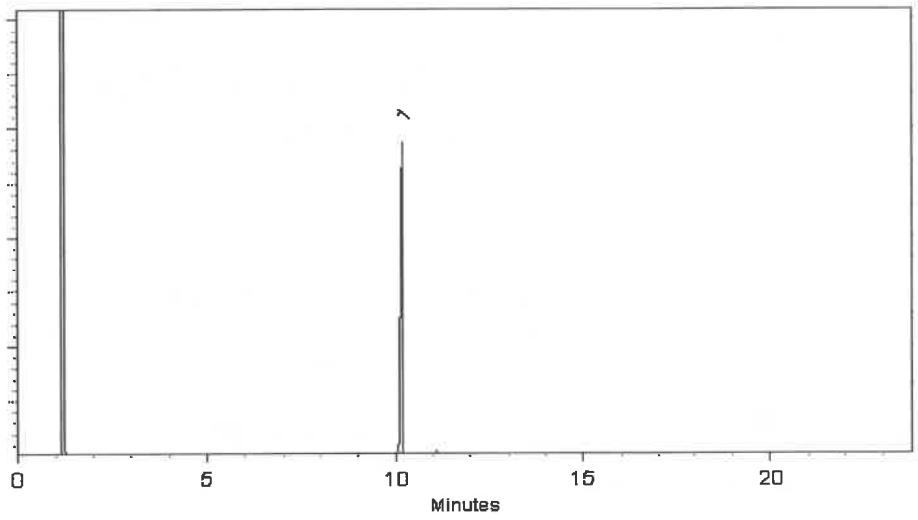
**Inj. Temp:**
250°C

**Det. Temp:**
330°C

**Det. Type:**
FID

**Split Vent:**
10 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.

Stacey Wanner - Operations Technician I

**Date Mixed:** 28-Jun-2024 **Balance Serial #** B345965662

Dillan Murphy - Operations Technician I

**Date Passed:** 01-Jul-2024

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

# General Certified Reference Material Notes

## Expiration Notes:

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

## Purity Notes:

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

## Certified Uncertainty Value Notes:

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

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

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

## Manufacturing Notes:

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

## Handling Notes:

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

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CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

*chromatographic plus*

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ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

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**Catalog No. :** 31098 **Lot No.:** A0213283

**Description :** 1-Chlorooctadecane Standard

1-Chlorooctadecane Standard 10,000µg/mL, Methylene Chloride, 1mL/ampul

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

**Expiration Date :** July 31, 2031 **Storage:** 10°C or colder

**Ship:** Ambient

P13595 ↓ P13624 Y.P. 10/16/24

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | 1-Chlorooctadecane | 3386-33-2 | 15018900 | 99% | 10,058.0 µg/mL | +/- 565.0578 |

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

**Solvent:** Methylene chloride
**CAS #** 75-09-2
**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:**
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

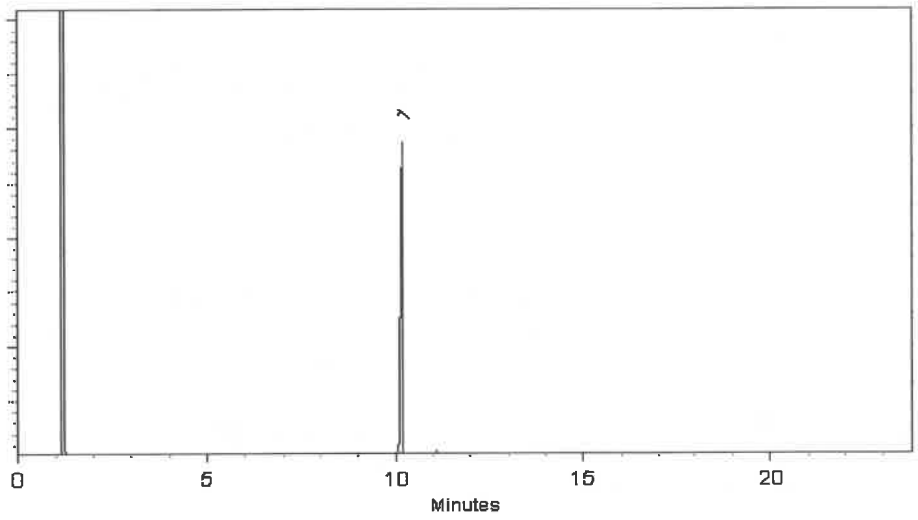
**Inj. Temp:**
250°C

**Det. Temp:**
330°C

**Det. Type:**
FID

**Split Vent:**
10 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.

Stacey Wanner - Operations Technician I

**Date Mixed:** 28-Jun-2024 **Balance Serial #** B345965662

Dillan Murphy - Operations Technician I

**Date Passed:** 01-Jul-2024

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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

### Certified Uncertainty Value Notes:

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

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

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

### Manufacturing Notes:

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

### Handling Notes:

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

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CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

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ISO 17034 Accredited
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Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

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

**Catalog No. :** 30542 **Lot No.:** A0211112

**Description :** NJEPH Aliphatics Matrix Spike Mix

NJEPH Aliphatics Matrix Spike Mix 200 µg/mL, n-Pentane, 5mL/ampul

**Container Size :** 5 mL **Pkg Amt:** > 5 mL

**Expiration Date :** June 30, 2031 **Storage:** 10°C or colder

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

P13625
↓
P13644
Y.P. 10/16/24

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | n-Nonane (C9) | 111-84-2 | SHBP9752 | 99% | 200.9 µg/mL | +/- 5.1891 |
| 2 | n-Decane (C10) | 124-18-5 | SHBQ1342 | 99% | 200.7 µg/mL | +/- 5.1857 |
| 3 | n-Dodecane (C12) | 112-40-3 | SHBP7054 | 99% | 200.4 µg/mL | +/- 5.1771 |
| 4 | n-Tetradecane (C14) | 629-59-4 | STBK5437 | 99% | 200.7 µg/mL | +/- 5.1839 |
| 5 | n-Hexadecane (C16) | 544-76-3 | SHBR0669 | 99% | 200.6 µg/mL | +/- 5.1822 |
| 6 | n-Octadecane (C18) | 593-45-3 | UE5NG | 98% | 200.4 µg/mL | +/- 5.1782 |
| 7 | n-Eicosane (C20) | 112-95-8 | MKCN8767 | 97% | 200.4 µg/mL | +/- 5.1771 |
| 8 | n-Heneicosane (C21) | 629-94-7 | MKCL3226 | 99% | 200.5 µg/mL | +/- 5.1796 |
| 9 | n-Docosane (C22) | 629-97-0 | MKCQ3882 | 99% | 200.6 µg/mL | +/- 5.1814 |
| 10 | n-Tetracosane (C24) | 646-31-1 | MKCS9978 | 99% | 200.5 µg/mL | +/- 5.1805 |
| 11 | n-Hexacosane (C26) | 630-01-3 | MKCQ4814 | 99% | 200.5 µg/mL | +/- 5.1796 |
| 12 | n-Octacosane (C28) | 630-02-4 | BCCG0084 | 99% | 200.5 µg/mL | +/- 5.1796 |
| 13 | n-Triacontane (C30) | 638-68-6 | MKCQ9436 | 97% | 200.4 µg/mL | +/- 5.1763 |
| 14 | n-Dotriacontane (C32) | 544-85-4 | BCBW0661 | 99% | 200.4 µg/mL | +/- 5.1779 |
| 15 | n-Tetratriacontane (C34) | 14167-59-0 | D3MZN | 99% | 200.5 µg/mL | +/- 5.1805 |
| 16 | n-Hexatriacontane (C36) | 630-06-8 | Z27H018 | 99% | 200.6 µg/mL | +/- 5.1814 |
| 17 | n-Octatriacontane (C38) | 7194-85-6 | 0000145137 | 96% | 200.5 µg/mL | +/- 5.1808 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 18 | n-Tetracontane (C40) | 4181-95-7 | OKEGA | 99% | 200.5 µg/mL | +/- | 5.1805 |

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

**Solvent:** n-Pentane
**CAS #** 109-66-0
**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.)

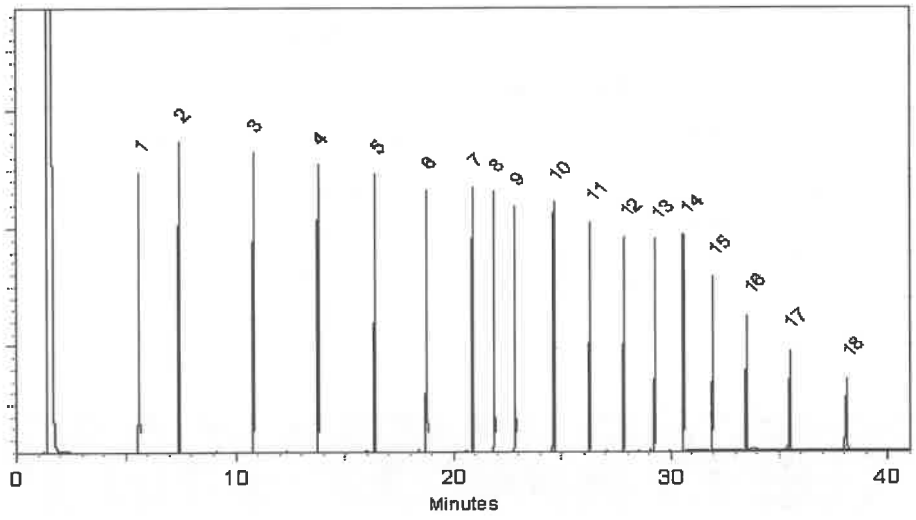
**Inj. Temp:**
250°C

**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.

Laith Clemente - Operations Technician I

**Date Mixed:** 07-May-2024 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

**Date Passed:** 09-May-2024

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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

### Certified Uncertainty Value Notes:

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

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

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

### Manufacturing Notes:

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

### Handling Notes:

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

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Certificate #3222.01

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# 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. :** 30542 **Lot No.:** A0211112

**Description :** NJEPH Aliphatics Matrix Spike Mix

NJEPH Aliphatics Matrix Spike Mix 200 µg/mL, n-Pentane, 5mL/ampul

**Container Size :** 5 mL **Pkg Amt:** > 5 mL

**Expiration Date :** June 30, 2031 **Storage:** 10°C or colder

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

P13625
↓
P13644
Y.P. 10/16/24

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | n-Nonane (C9) | 111-84-2 | SHBP9752 | 99% | 200.9 µg/mL | +/- 5.1891 |
| 2 | n-Decane (C10) | 124-18-5 | SHBQ1342 | 99% | 200.7 µg/mL | +/- 5.1857 |
| 3 | n-Dodecane (C12) | 112-40-3 | SHBP7054 | 99% | 200.4 µg/mL | +/- 5.1771 |
| 4 | n-Tetradecane (C14) | 629-59-4 | STBK5437 | 99% | 200.7 µg/mL | +/- 5.1839 |
| 5 | n-Hexadecane (C16) | 544-76-3 | SHBR0669 | 99% | 200.6 µg/mL | +/- 5.1822 |
| 6 | n-Octadecane (C18) | 593-45-3 | UE5NG | 98% | 200.4 µg/mL | +/- 5.1782 |
| 7 | n-Eicosane (C20) | 112-95-8 | MKCN8767 | 97% | 200.4 µg/mL | +/- 5.1771 |
| 8 | n-Heneicosane (C21) | 629-94-7 | MKCL3226 | 99% | 200.5 µg/mL | +/- 5.1796 |
| 9 | n-Docosane (C22) | 629-97-0 | MKCQ3882 | 99% | 200.6 µg/mL | +/- 5.1814 |
| 10 | n-Tetracosane (C24) | 646-31-1 | MKCS9978 | 99% | 200.5 µg/mL | +/- 5.1805 |
| 11 | n-Hexacosane (C26) | 630-01-3 | MKCQ4814 | 99% | 200.5 µg/mL | +/- 5.1796 |
| 12 | n-Octacosane (C28) | 630-02-4 | BCCG0084 | 99% | 200.5 µg/mL | +/- 5.1796 |
| 13 | n-Triacontane (C30) | 638-68-6 | MKCQ9436 | 97% | 200.4 µg/mL | +/- 5.1763 |
| 14 | n-Dotriacontane (C32) | 544-85-4 | BCBW0661 | 99% | 200.4 µg/mL | +/- 5.1779 |
| 15 | n-Tetratriacontane (C34) | 14167-59-0 | D3MZN | 99% | 200.5 µg/mL | +/- 5.1805 |
| 16 | n-Hexatriacontane (C36) | 630-06-8 | Z27H018 | 99% | 200.6 µg/mL | +/- 5.1814 |
| 17 | n-Octatriacontane (C38) | 7194-85-6 | 0000145137 | 96% | 200.5 µg/mL | +/- 5.1808 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 18 | n-Tetracontane (C40) | 4181-95-7 | OKEGA | 99% | 200.5 µg/mL | +/- | 5.1805 |

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

**Solvent:** n-Pentane
**CAS #** 109-66-0
**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.)

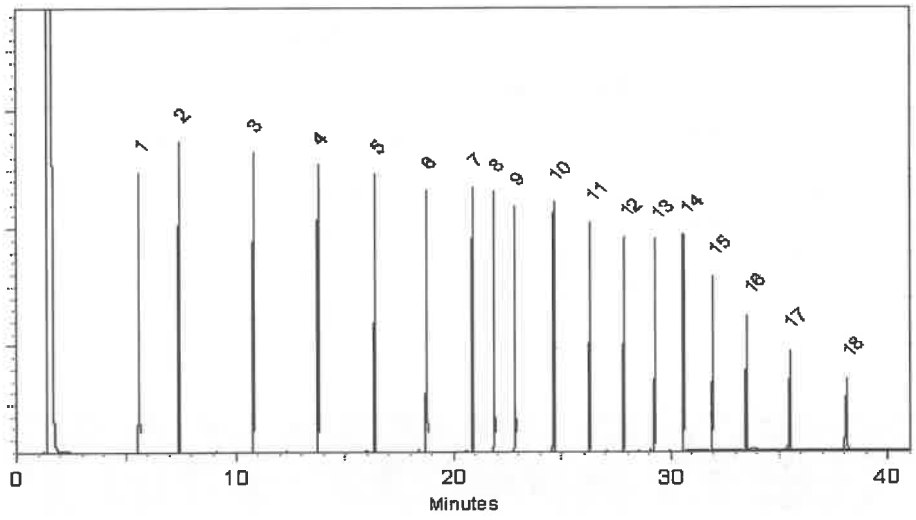
**Inj. Temp:**
250°C

**Det. Temp:**
330°C

**Det. Type:**
FID

**Split Vent:**
2 ml/min.

**Inj. Vol**
1µl




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Laith Clemente - Operations Technician I

**Date Mixed:** 07-May-2024 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

**Date Passed:** 09-May-2024

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
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### Handling Notes:

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

RESTEK
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*

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

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

**Catalog No. :** 30542 **Lot No.:** A0211112

**Description :** NJEPH Aliphatics Matrix Spike Mix

NJEPH Aliphatics Matrix Spike Mix 200 µg/mL, n-Pentane, 5mL/ampul

**Container Size :** 5 mL **Pkg Amt:** > 5 mL

**Expiration Date :** June 30, 2031 **Storage:** 10°C or colder

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

P13625
↓
P13644
Y.P. 10/16/24

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | n-Nonane (C9) | 111-84-2 | SHBP9752 | 99% | 200.9 µg/mL | +/- 5.1891 |
| 2 | n-Decane (C10) | 124-18-5 | SHBQ1342 | 99% | 200.7 µg/mL | +/- 5.1857 |
| 3 | n-Dodecane (C12) | 112-40-3 | SHBP7054 | 99% | 200.4 µg/mL | +/- 5.1771 |
| 4 | n-Tetradecane (C14) | 629-59-4 | STBK5437 | 99% | 200.7 µg/mL | +/- 5.1839 |
| 5 | n-Hexadecane (C16) | 544-76-3 | SHBR0669 | 99% | 200.6 µg/mL | +/- 5.1822 |
| 6 | n-Octadecane (C18) | 593-45-3 | UE5NG | 98% | 200.4 µg/mL | +/- 5.1782 |
| 7 | n-Eicosane (C20) | 112-95-8 | MKCN8767 | 97% | 200.4 µg/mL | +/- 5.1771 |
| 8 | n-Heneicosane (C21) | 629-94-7 | MKCL3226 | 99% | 200.5 µg/mL | +/- 5.1796 |
| 9 | n-Docosane (C22) | 629-97-0 | MKCQ3882 | 99% | 200.6 µg/mL | +/- 5.1814 |
| 10 | n-Tetracosane (C24) | 646-31-1 | MKCS9978 | 99% | 200.5 µg/mL | +/- 5.1805 |
| 11 | n-Hexacosane (C26) | 630-01-3 | MKCQ4814 | 99% | 200.5 µg/mL | +/- 5.1796 |
| 12 | n-Octacosane (C28) | 630-02-4 | BCCG0084 | 99% | 200.5 µg/mL | +/- 5.1796 |
| 13 | n-Triacontane (C30) | 638-68-6 | MKCQ9436 | 97% | 200.4 µg/mL | +/- 5.1763 |
| 14 | n-Dotriacontane (C32) | 544-85-4 | BCBW0661 | 99% | 200.4 µg/mL | +/- 5.1779 |
| 15 | n-Tetratriacontane (C34) | 14167-59-0 | D3MZN | 99% | 200.5 µg/mL | +/- 5.1805 |
| 16 | n-Hexatriacontane (C36) | 630-06-8 | Z27H018 | 99% | 200.6 µg/mL | +/- 5.1814 |
| 17 | n-Octatriacontane (C38) | 7194-85-6 | 0000145137 | 96% | 200.5 µg/mL | +/- 5.1808 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 18 | n-Tetracontane (C40) | 4181-95-7 | OKEGA | 99% | 200.5 µg/mL | +/- | 5.1805 |

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

**Solvent:** n-Pentane
**CAS #** 109-66-0
**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.)

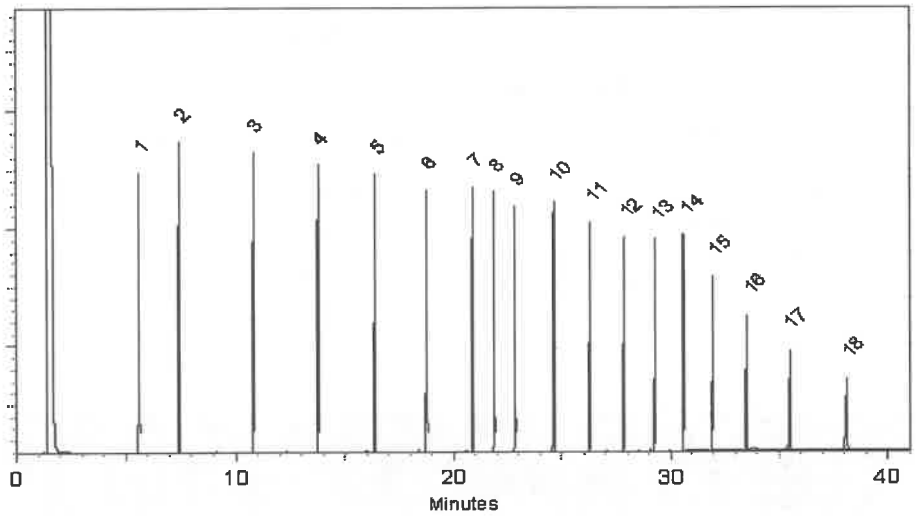
**Inj. Temp:**
250°C

**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.

Laith Clemente - Operations Technician I

**Date Mixed:** 07-May-2024 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

**Date Passed:** 09-May-2024

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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

### Certified Uncertainty Value Notes:

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

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

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

### Manufacturing Notes:

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

### Handling Notes:

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

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Certificate #3222.01

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Testing Laboratory
Certificate #3222.02

# Certificate of Analysis

***chromatographic plus***

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

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

**Catalog No. :** 30542 **Lot No.:** A0211112

**Description :** NJEPH Aliphatics Matrix Spike Mix

NJEPH Aliphatics Matrix Spike Mix 200 µg/mL, n-Pentane, 5mL/ampul

**Container Size :** 5 mL **Pkg Amt:** > 5 mL

**Expiration Date :** June 30, 2031 **Storage:** 10°C or colder

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

P13625
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P13644
Y.P. 10/16/24

**CERTIFIED VALUES**

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | n-Nonane (C9) | 111-84-2 | SHBP9752 | 99% | 200.9 µg/mL | +/- 5.1891 |
| 2 | n-Decane (C10) | 124-18-5 | SHBQ1342 | 99% | 200.7 µg/mL | +/- 5.1857 |
| 3 | n-Dodecane (C12) | 112-40-3 | SHBP7054 | 99% | 200.4 µg/mL | +/- 5.1771 |
| 4 | n-Tetradecane (C14) | 629-59-4 | STBK5437 | 99% | 200.7 µg/mL | +/- 5.1839 |
| 5 | n-Hexadecane (C16) | 544-76-3 | SHBR0669 | 99% | 200.6 µg/mL | +/- 5.1822 |
| 6 | n-Octadecane (C18) | 593-45-3 | UE5NG | 98% | 200.4 µg/mL | +/- 5.1782 |
| 7 | n-Eicosane (C20) | 112-95-8 | MKCN8767 | 97% | 200.4 µg/mL | +/- 5.1771 |
| 8 | n-Heneicosane (C21) | 629-94-7 | MKCL3226 | 99% | 200.5 µg/mL | +/- 5.1796 |
| 9 | n-Docosane (C22) | 629-97-0 | MKCQ3882 | 99% | 200.6 µg/mL | +/- 5.1814 |
| 10 | n-Tetracosane (C24) | 646-31-1 | MKCS9978 | 99% | 200.5 µg/mL | +/- 5.1805 |
| 11 | n-Hexacosane (C26) | 630-01-3 | MKCQ4814 | 99% | 200.5 µg/mL | +/- 5.1796 |
| 12 | n-Octacosane (C28) | 630-02-4 | BCCG0084 | 99% | 200.5 µg/mL | +/- 5.1796 |
| 13 | n-Triacontane (C30) | 638-68-6 | MKCQ9436 | 97% | 200.4 µg/mL | +/- 5.1763 |
| 14 | n-Dotriacontane (C32) | 544-85-4 | BCBW0661 | 99% | 200.4 µg/mL | +/- 5.1779 |
| 15 | n-Tetratriacontane (C34) | 14167-59-0 | D3MZN | 99% | 200.5 µg/mL | +/- 5.1805 |
| 16 | n-Hexatriacontane (C36) | 630-06-8 | Z27H018 | 99% | 200.6 µg/mL | +/- 5.1814 |
| 17 | n-Octatriacontane (C38) | 7194-85-6 | 0000145137 | 96% | 200.5 µg/mL | +/- 5.1808 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 18 | n-Tetracontane (C40) | 4181-95-7 | OKEGA | 99% | 200.5 µg/mL | +/- | 5.1805 |

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

**Solvent:** n-Pentane
**CAS #** 109-66-0
**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.)

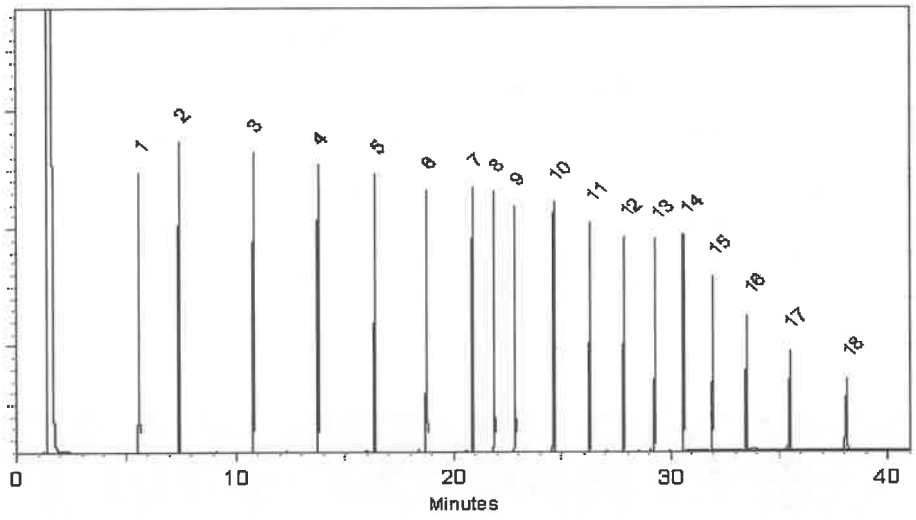
**Inj. Temp:**
250°C

**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.

Laith Clemente - Operations Technician I

**Date Mixed:** 07-May-2024 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

**Date Passed:** 09-May-2024

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

## General Certified Reference Material Notes

### Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
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### Purity Notes:

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- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

### Certified Uncertainty Value Notes:

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

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

### Manufacturing Notes:

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

### Handling Notes:

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# Certificate of Analysis

***chromatographic plus***

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

**Catalog No. :** 30542 **Lot No.:** A0211112

**Description :** NJEPH Aliphatics Matrix Spike Mix

NJEPH Aliphatics Matrix Spike Mix 200 µg/mL, n-Pentane, 5mL/ampul

**Container Size :** 5 mL **Pkg Amt:** > 5 mL

**Expiration Date :** June 30, 2031 **Storage:** 10°C or colder

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

P13625
↓
P13644
Y.P. 10/16/24

**CERTIFIED VALUES**

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | n-Nonane (C9) | 111-84-2 | SHBP9752 | 99% | 200.9 µg/mL | +/- 5.1891 |
| 2 | n-Decane (C10) | 124-18-5 | SHBQ1342 | 99% | 200.7 µg/mL | +/- 5.1857 |
| 3 | n-Dodecane (C12) | 112-40-3 | SHBP7054 | 99% | 200.4 µg/mL | +/- 5.1771 |
| 4 | n-Tetradecane (C14) | 629-59-4 | STBK5437 | 99% | 200.7 µg/mL | +/- 5.1839 |
| 5 | n-Hexadecane (C16) | 544-76-3 | SHBR0669 | 99% | 200.6 µg/mL | +/- 5.1822 |
| 6 | n-Octadecane (C18) | 593-45-3 | UE5NG | 98% | 200.4 µg/mL | +/- 5.1782 |
| 7 | n-Eicosane (C20) | 112-95-8 | MKCN8767 | 97% | 200.4 µg/mL | +/- 5.1771 |
| 8 | n-Heneicosane (C21) | 629-94-7 | MKCL3226 | 99% | 200.5 µg/mL | +/- 5.1796 |
| 9 | n-Docosane (C22) | 629-97-0 | MKCQ3882 | 99% | 200.6 µg/mL | +/- 5.1814 |
| 10 | n-Tetracosane (C24) | 646-31-1 | MKCS9978 | 99% | 200.5 µg/mL | +/- 5.1805 |
| 11 | n-Hexacosane (C26) | 630-01-3 | MKCQ4814 | 99% | 200.5 µg/mL | +/- 5.1796 |
| 12 | n-Octacosane (C28) | 630-02-4 | BCCG0084 | 99% | 200.5 µg/mL | +/- 5.1796 |
| 13 | n-Triacontane (C30) | 638-68-6 | MKCQ9436 | 97% | 200.4 µg/mL | +/- 5.1763 |
| 14 | n-Dotriacontane (C32) | 544-85-4 | BCBW0661 | 99% | 200.4 µg/mL | +/- 5.1779 |
| 15 | n-Tetratriacontane (C34) | 14167-59-0 | D3MZN | 99% | 200.5 µg/mL | +/- 5.1805 |
| 16 | n-Hexatriacontane (C36) | 630-06-8 | Z27H018 | 99% | 200.6 µg/mL | +/- 5.1814 |
| 17 | n-Octatriacontane (C38) | 7194-85-6 | 0000145137 | 96% | 200.5 µg/mL | +/- 5.1808 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 18 | n-Tetracontane (C40) | 4181-95-7 | OKEGA | 99% | 200.5 µg/mL | +/- | 5.1805 |

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

**Solvent:** n-Pentane
**CAS #** 109-66-0
**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.)

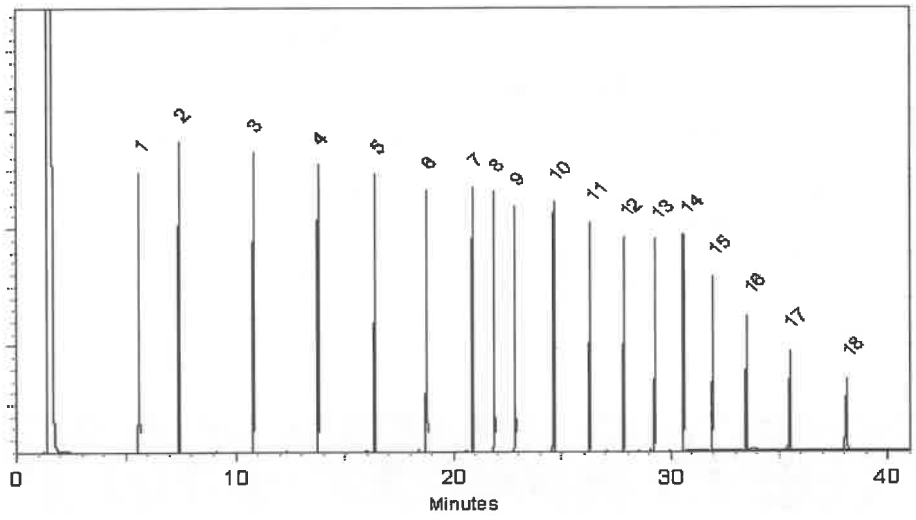
**Inj. Temp:**
250°C

**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.

Laith Clemente - Operations Technician I

**Date Mixed:** 07-May-2024 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

**Date Passed:** 09-May-2024

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

## General Certified Reference Material Notes

### Expiration Notes:

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### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
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- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

### Certified Uncertainty Value Notes:

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

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  $k$ 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:

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### Handling Notes:

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**Catalog No. :** 30542 **Lot No.:** A0211112

**Description :** NJEPH Aliphatics Matrix Spike Mix

NJEPH Aliphatics Matrix Spike Mix 200 µg/mL, n-Pentane, 5mL/ampul

**Container Size :** 5 mL **Pkg Amt:** > 5 mL

**Expiration Date :** June 30, 2031 **Storage:** 10°C or colder

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

P13625
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P13644
Y.P. 10/16/24

**CERTIFIED VALUES**

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
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| 2 | n-Decane (C10) | 124-18-5 | SHBQ1342 | 99% | 200.7 µg/mL | +/- 5.1857 |
| 3 | n-Dodecane (C12) | 112-40-3 | SHBP7054 | 99% | 200.4 µg/mL | +/- 5.1771 |
| 4 | n-Tetradecane (C14) | 629-59-4 | STBK5437 | 99% | 200.7 µg/mL | +/- 5.1839 |
| 5 | n-Hexadecane (C16) | 544-76-3 | SHBR0669 | 99% | 200.6 µg/mL | +/- 5.1822 |
| 6 | n-Octadecane (C18) | 593-45-3 | UE5NG | 98% | 200.4 µg/mL | +/- 5.1782 |
| 7 | n-Eicosane (C20) | 112-95-8 | MKCN8767 | 97% | 200.4 µg/mL | +/- 5.1771 |
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| 9 | n-Docosane (C22) | 629-97-0 | MKCQ3882 | 99% | 200.6 µg/mL | +/- 5.1814 |
| 10 | n-Tetracosane (C24) | 646-31-1 | MKCS9978 | 99% | 200.5 µg/mL | +/- 5.1805 |
| 11 | n-Hexacosane (C26) | 630-01-3 | MKCQ4814 | 99% | 200.5 µg/mL | +/- 5.1796 |
| 12 | n-Octacosane (C28) | 630-02-4 | BCCG0084 | 99% | 200.5 µg/mL | +/- 5.1796 |
| 13 | n-Triacontane (C30) | 638-68-6 | MKCQ9436 | 97% | 200.4 µg/mL | +/- 5.1763 |
| 14 | n-Dotriacontane (C32) | 544-85-4 | BCBW0661 | 99% | 200.4 µg/mL | +/- 5.1779 |
| 15 | n-Tetratriacontane (C34) | 14167-59-0 | D3MZN | 99% | 200.5 µg/mL | +/- 5.1805 |
| 16 | n-Hexatriacontane (C36) | 630-06-8 | Z27H018 | 99% | 200.6 µg/mL | +/- 5.1814 |
| 17 | n-Octatriacontane (C38) | 7194-85-6 | 0000145137 | 96% | 200.5 µg/mL | +/- 5.1808 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 18 | n-Tetracontane (C40) | 4181-95-7 | OKEGA | 99% | 200.5 µg/mL | +/- | 5.1805 |

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

**Solvent:** n-Pentane
**CAS #** 109-66-0
**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.)

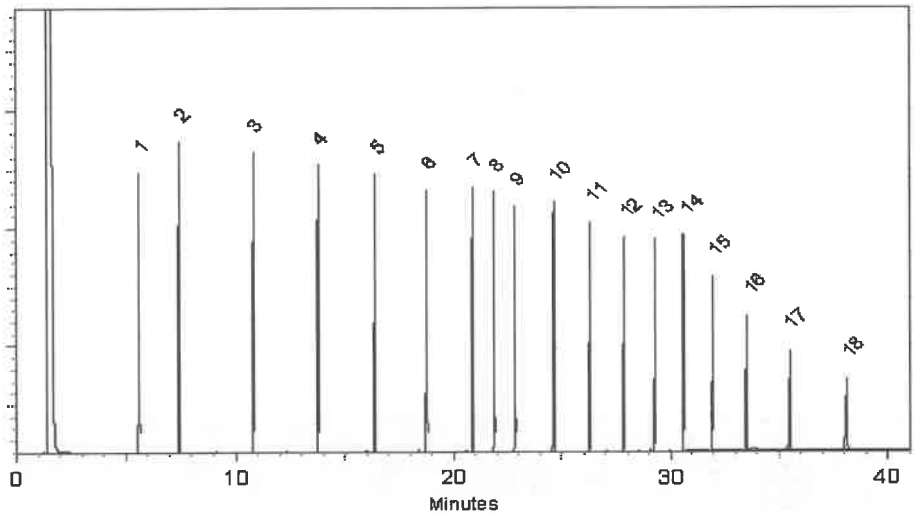
**Inj. Temp:**
250°C

**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.

Laith Clemente - Operations Technician I

**Date Mixed:** 07-May-2024 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

**Date Passed:** 09-May-2024

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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

### Certified Uncertainty Value Notes:

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

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

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

### Manufacturing Notes:

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

### Handling Notes:

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

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# Certificate of Analysis

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**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. :** 31097 **Lot No.:** A0216631

**Description :** o-Terphenyl Standard

o-Terphenyl Standard 10,000 µg/mL, Methylene Chloride, 1mL/ampul

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

**Expiration Date :** April 30, 2028 **Storage:** 10°C or colder

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

P13645 → P13694 Y.P. 10/16/24

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | o-Terphenyl | 84-15-1 | GKSSA | 99% | 10,065.0 µg/mL | +/- 453.3336 |

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

**Solvent:** Methylene chloride
**CAS #** 75-09-2
**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:**
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

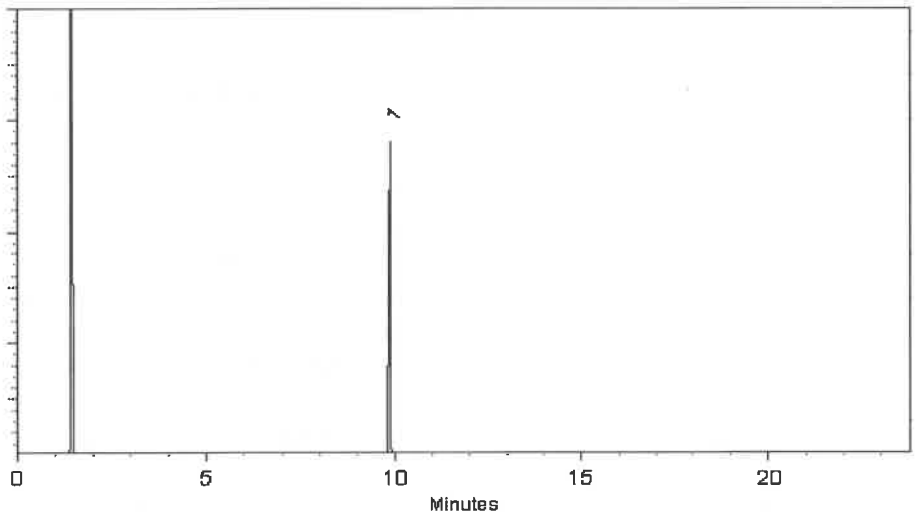
**Inj. Temp:**
250°C

**Det. Temp:**
330°C

**Det. Type:**
FID

**Split Vent:**
10 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.

Ven Kelley - Operations Tech I  **Date Mixed:** 17-Sep-2024  **Balance Serial #** 1128353505

Dillan Murphy - Operations Technician I  **Date Passed:** 23-Sep-2024

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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

### Certified Uncertainty Value Notes:

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

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  $k$ 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.
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# Certificate of Analysis

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**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. :** 31097 **Lot No.:** A0216631

**Description :** o-Terphenyl Standard

o-Terphenyl Standard 10,000 µg/mL, Methylene Chloride, 1mL/ampul

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

**Expiration Date :** April 30, 2028 **Storage:** 10°C or colder

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

P13645 → P13694 Y.P. 10/16/24

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | o-Terphenyl | 84-15-1 | GKSSA | 99% | 10,065.0 µg/mL | +/- 453.3336 |

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

**Solvent:** Methylene chloride
**CAS #** 75-09-2
**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:**
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

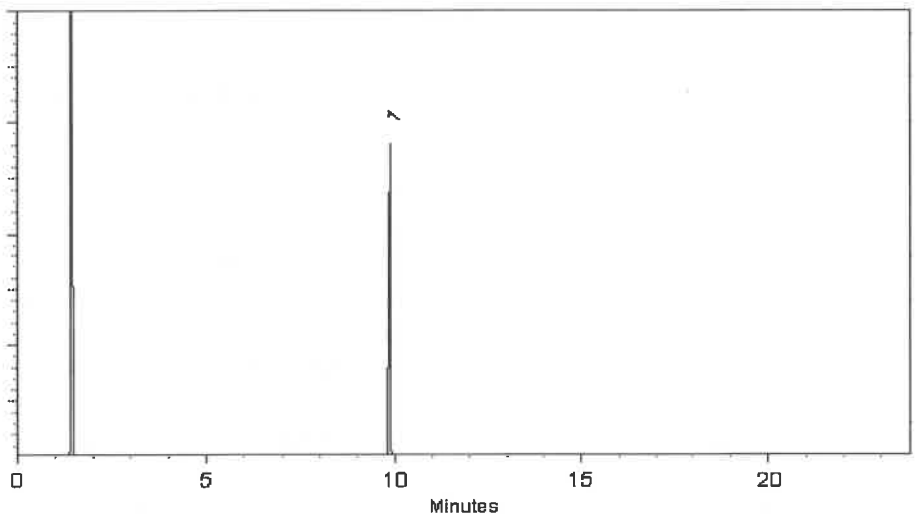
**Inj. Temp:**
250°C

**Det. Temp:**
330°C

**Det. Type:**
FID

**Split Vent:**
10 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.

Ven Kelley - Operations Tech I **Date Mixed:** 17-Sep-2024 **Balance Serial #** 1128353505

Dillan Murphy - Operations Technician I **Date Passed:** 23-Sep-2024

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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

### Certified Uncertainty Value Notes:

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

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

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

### Manufacturing Notes:

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

### Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 31097 **Lot No.:** A0216631

**Description :** o-Terphenyl Standard

o-Terphenyl Standard 10,000 µg/mL, Methylene Chloride, 1mL/ampul

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

**Expiration Date :** April 30, 2028 **Storage:** 10°C or colder

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

P13645 → P13694 Y.P. 10/16/24

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | o-Terphenyl | 84-15-1 | GKSSA | 99% | 10,065.0 µg/mL | +/- 453.3336 |

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

**Solvent:** Methylene chloride
**CAS #** 75-09-2
**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:**
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

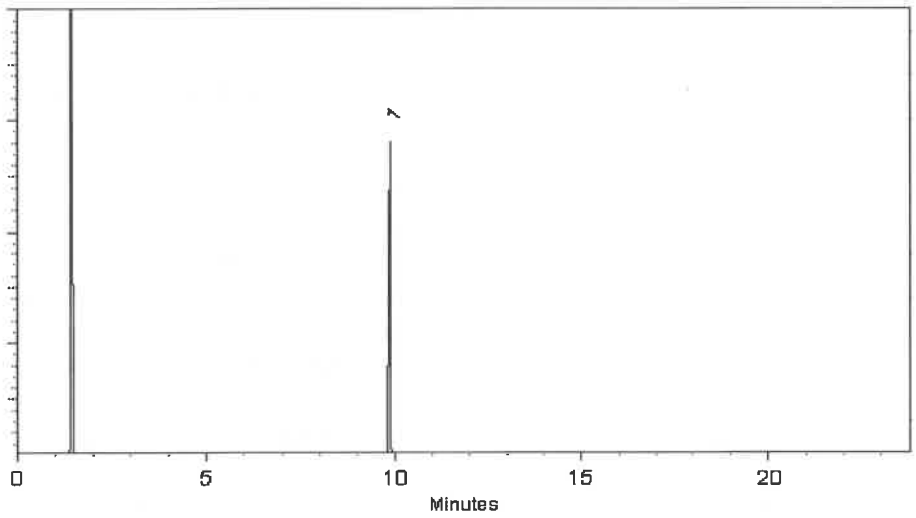
**Inj. Temp:**
250°C

**Det. Temp:**
330°C

**Det. Type:**
FID

**Split Vent:**
10 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.

Ven Kelley - Operations Tech I  **Date Mixed:** 17-Sep-2024  **Balance Serial #** 1128353505

Dillan Murphy - Operations Technician I  **Date Passed:** 23-Sep-2024

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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

### Certified Uncertainty Value Notes:

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

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### 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.

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**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. :** 31097 **Lot No.:** A0216631

**Description :** o-Terphenyl Standard

o-Terphenyl Standard 10,000 µg/mL, Methylene Chloride, 1mL/ampul

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

**Expiration Date :** April 30, 2028 **Storage:** 10°C or colder

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

P13645 → P13694 Y.P. 10/16/24

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | o-Terphenyl | 84-15-1 | GKSSA | 99% | 10,065.0 µg/mL | +/- 453.3336 |

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

**Solvent:** Methylene chloride
**CAS #** 75-09-2
**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:**
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

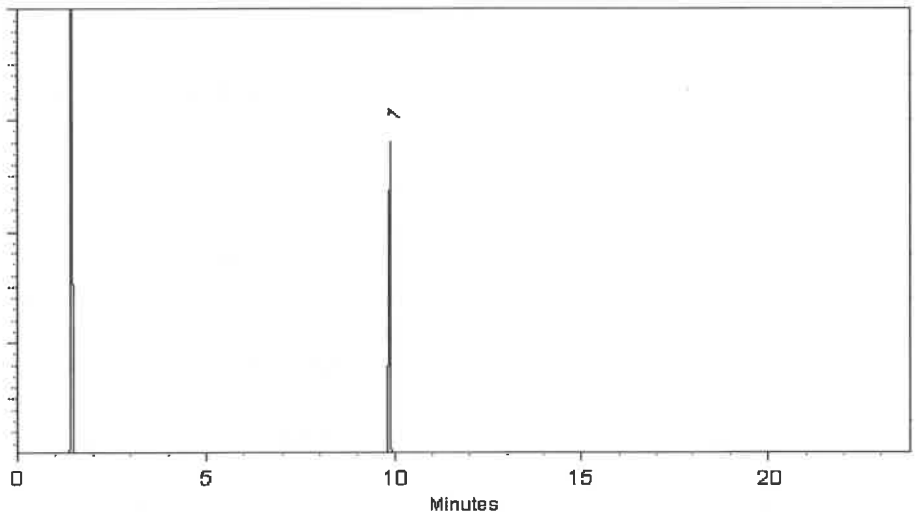
**Inj. Temp:**
250°C

**Det. Temp:**
330°C

**Det. Type:**
FID

**Split Vent:**
10 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.

Ven Kelley - Operations Tech I **Date Mixed:** 17-Sep-2024 **Balance Serial #** 1128353505

Dillan Murphy - Operations Technician I **Date Passed:** 23-Sep-2024

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

## General Certified Reference Material Notes

### Expiration Notes:

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**Description :** o-Terphenyl Standard

o-Terphenyl Standard 10,000 µg/mL, Methylene Chloride, 1mL/ampul

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

**Expiration Date :** April 30, 2028 **Storage:** 10°C or colder

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

P13645 ↓ P13694 } Y.P. 10/16/24

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
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**Solvent:** Methylene chloride
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**Purity** 99%

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

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

**Temp. Program:**
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

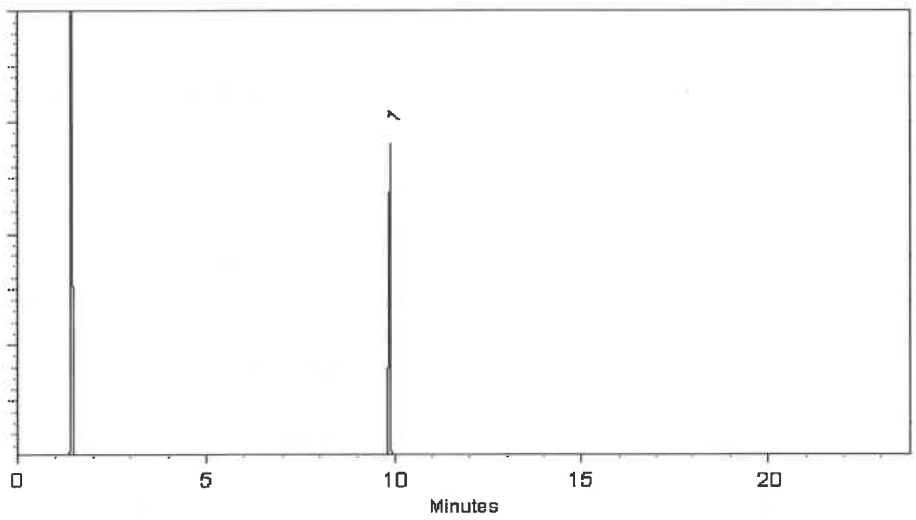
**Inj. Temp:**
250°C

**Det. Temp:**
330°C

**Det. Type:**
FID

**Split Vent:**
10 ml/min.

**Inj. Vol**
1µl




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Ven Kelley - Operations Tech I  **Date Mixed:** 17-Sep-2024  **Balance Serial #** 1128353505

Dillan Murphy - Operations Technician I  **Date Passed:** 23-Sep-2024

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

## General Certified Reference Material Notes

### Expiration Notes:

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

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

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

### Manufacturing Notes:

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

### Handling Notes:

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

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# CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

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Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

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

**Catalog No. :** 31097 **Lot No.:** A0216631

**Description :** o-Terphenyl Standard

o-Terphenyl Standard 10,000 µg/mL, Methylene Chloride, 1mL/ampul

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

**Expiration Date :** April 30, 2028 **Storage:** 10°C or colder

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

P13645 → P13694 Y.P. 10/16/24

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | o-Terphenyl | 84-15-1 | GKSSA | 99% | 10,065.0 µg/mL | +/- 453.3336 |

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

**Solvent:** Methylene chloride
**CAS #** 75-09-2
**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:**
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

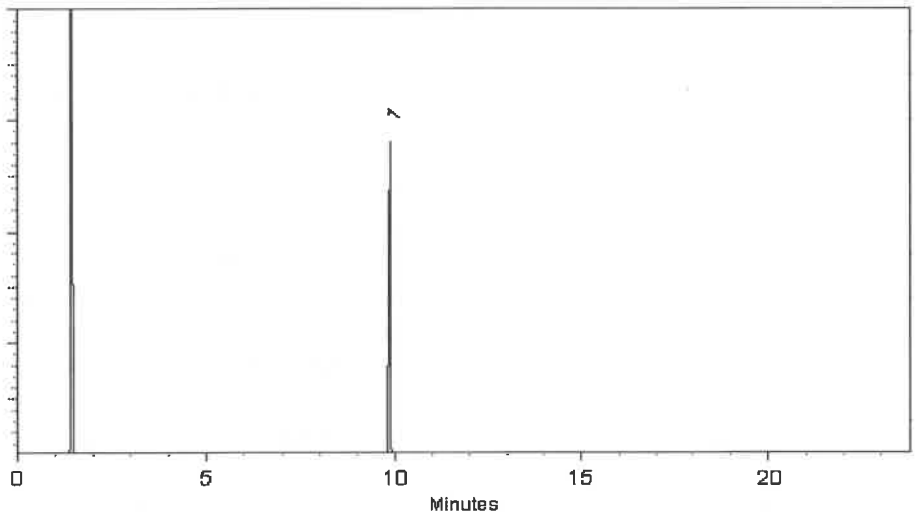
**Inj. Temp:**
250°C

**Det. Temp:**
330°C

**Det. Type:**
FID

**Split Vent:**
10 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.

Ven Kelley - Operations Tech I **Date Mixed:** 17-Sep-2024 **Balance Serial #** 1128353505

Dillan Murphy - Operations Technician I **Date Passed:** 23-Sep-2024

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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

### Certified Uncertainty Value Notes:

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

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

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

### Manufacturing Notes:

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

### Handling Notes:

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

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**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. :** 31097 **Lot No.:** A0216631

**Description :** o-Terphenyl Standard

o-Terphenyl Standard 10,000 µg/mL, Methylene Chloride, 1mL/ampul

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

**Expiration Date :** April 30, 2028 **Storage:** 10°C or colder

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

P13645 ↓ P13694 } Y.P. 10/16/24

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | o-Terphenyl | 84-15-1 | GKSSA | 99% | 10,065.0 µg/mL | +/- 453.3336 |

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

**Solvent:** Methylene chloride
**CAS #** 75-09-2
**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:**
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

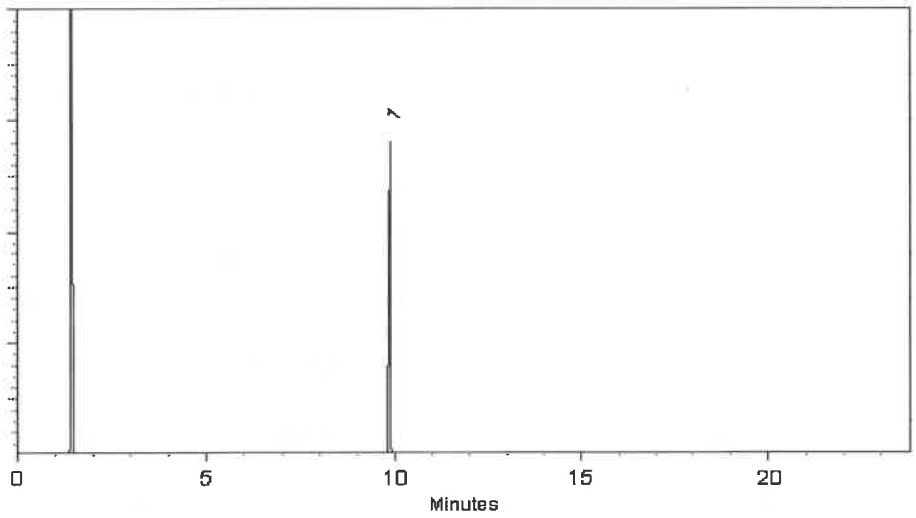
**Inj. Temp:**
250°C

**Det. Temp:**
330°C

**Det. Type:**
FID

**Split Vent:**
10 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.

Ven Kelley - Operations Tech I **Date Mixed:** 17-Sep-2024 **Balance Serial #** 1128353505

Dillan Murphy - Operations Technician I **Date Passed:** 23-Sep-2024

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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

### Certified Uncertainty Value Notes:

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

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

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

### Manufacturing Notes:

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

### Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

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

**Catalog No. :** 31097 **Lot No.:** A0216631

**Description :** o-Terphenyl Standard

o-Terphenyl Standard 10,000 µg/mL, Methylene Chloride, 1mL/ampul

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

**Expiration Date :** April 30, 2028 **Storage:** 10°C or colder

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

P13645 → P13694 Y.P. 10/16/24

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | o-Terphenyl | 84-15-1 | GKSSA | 99% | 10,065.0 µg/mL | +/- 453.3336 |

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

**Solvent:** Methylene chloride
**CAS #** 75-09-2
**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:**
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

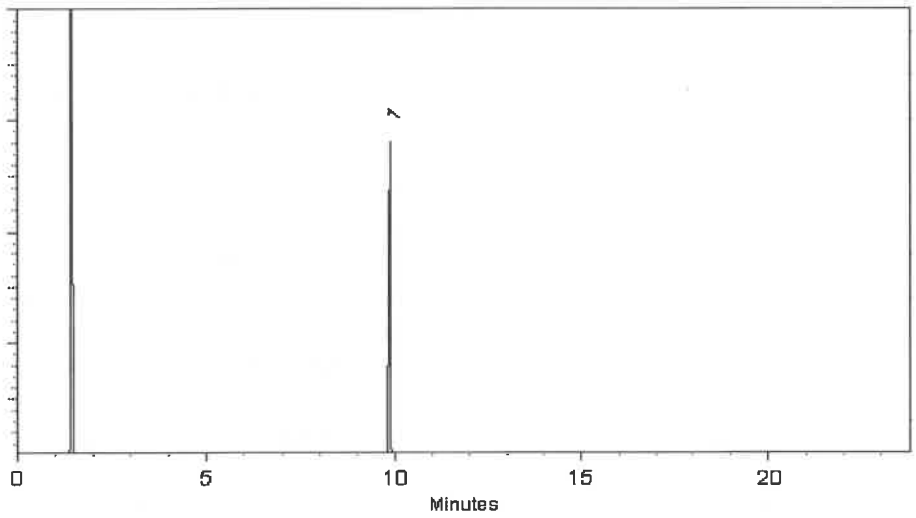
**Inj. Temp:**
250°C

**Det. Temp:**
330°C

**Det. Type:**
FID

**Split Vent:**
10 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.

Ven Kelley - Operations Tech I **Date Mixed:** 17-Sep-2024 **Balance Serial #** 1128353505

Dillan Murphy - Operations Technician I **Date Passed:** 23-Sep-2024

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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

### Certified Uncertainty Value Notes:

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

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

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

### Manufacturing Notes:

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

### Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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ilac-MRA A2LA ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

# Certificate of Analysis

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

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

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

**Catalog No. :** 30543 **Lot No.:** A0211254

**Description :** NJEPH Aromatics Matrix Spike Mix

NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

P13708 ) P137-16 } Y.P. 10/24/24

**Container Size :** 5 mL **Pkg Amt:** > 5 mL

**Expiration Date :** April 30, 2030 **Storage:** 10°C or colder

**Handling:** Sonication required. Mix is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | 1,2,3-Trimethylbenzene | 526-73-8 | 8776.10-38 | 99% | 200.0 µg/mL | +/- 9.0114 |
| 2 | Naphthalene | 91-20-3 | STBL1057 | 99% | 200.8 µg/mL | +/- 9.0474 |
| 3 | 2-Methylnaphthalene | 91-57-6 | STBK0259 | 96% | 200.4 µg/mL | +/- 9.0316 |
| 4 | Acenaphthylene | 208-96-8 | 214935L31M | 98% | 200.3 µg/mL | +/- 9.0255 |
| 5 | Acenaphthene | 83-32-9 | MKCR7169 | 99% | 202.0 µg/mL | +/- 9.1015 |
| 6 | Fluorene | 86-73-7 | 10241100 | 99% | 201.2 µg/mL | +/- 9.0655 |
| 7 | Phenanthrene | 85-01-8 | MKCS5188 | 99% | 200.4 µg/mL | +/- 9.0294 |
| 8 | Anthracene | 120-12-7 | MKCR0570 | 99% | 200.4 µg/mL | +/- 9.0294 |
| 9 | Fluoranthene | 206-44-0 | MKCQ4728 | 99% | 200.8 µg/mL | +/- 9.0474 |
| 10 | Pyrene | 129-00-0 | BCCK2592 | 99% | 201.2 µg/mL | +/- 9.0655 |
| 11 | Benz(a)anthracene | 56-55-3 | I30012022BAA | 99% | 200.8 µg/mL | +/- 9.0474 |
| 12 | Chrysene | 218-01-9 | RP231206RSR | 99% | 200.4 µg/mL | +/- 9.0294 |
| 13 | Benzo(b)fluoranthene | 205-99-2 | 012013B | 99% | 200.4 µg/mL | +/- 9.0294 |
| 14 | Benzo(k)fluoranthene | 207-08-9 | 012022K | 99% | 200.0 µg/mL | +/- 9.0114 |
| 15 | Benzo(a)pyrene | 50-32-8 | O45GL | 98% | 200.7 µg/mL | +/- 9.0431 |
| 16 | Indeno(1,2,3-cd)pyrene | 193-39-5 | 12-JKL-118-9 | 97% | 199.8 µg/mL | +/- 9.0033 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 17 | Dibenz(a,h)anthracene | 53-70-3 | 2-ASA-59-1 | 99% | 200.0 | µg/mL | +/- 9.0114 |
| 18 | Benzo(g,h,i)perylene | 191-24-2 | RP240105ECS | 99% | 200.8 | µg/mL | +/- 9.0474 |

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

**Solvent:** Acetone/Toluene (50:50)
**CAS #** 67-64-1/108-88-3
**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:**
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)

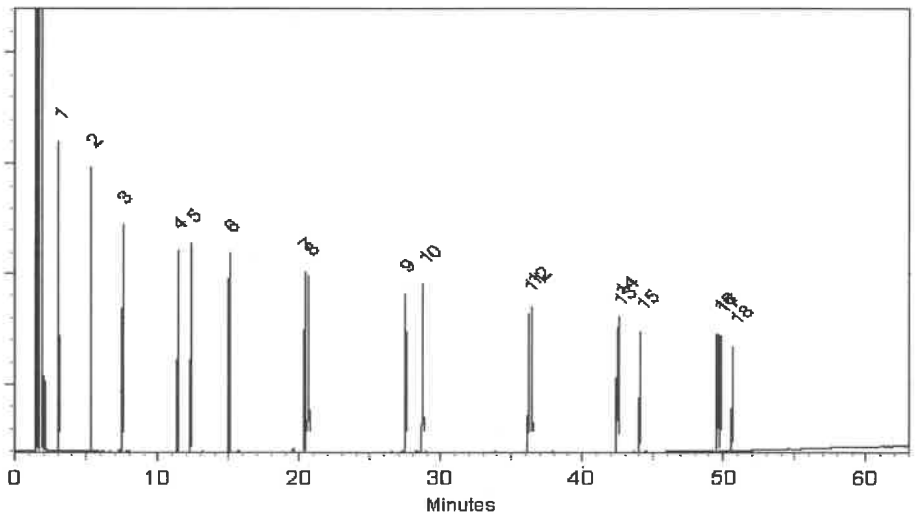
**Inj. Temp:**
250°C

**Det. Temp:**
330°C

**Det. Type:**
FID

**Split Vent:**
20 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.

Michael Maye - Operations Tech I **Date Mixed:** 09-May-2024 **Balance Serial #** 1128353505

Jennifer Pollino - Operations Tech III - ARM QC **Date Passed:** 13-May-2024

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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

### Certified Uncertainty Value Notes:

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

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

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

### Manufacturing Notes:

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

### Handling Notes:

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

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

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

**Catalog No. :** 30543 **Lot No.:** A0217838

**Description :** NJEPH Aromatics Matrix Spike Mix

NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

P13717 ↓ P13727 } Y.P 10/24/24

**Container Size :** 5 mL **Pkg Amt:** > 5 mL

**Expiration Date :** September 30, 2030 **Storage:** 10°C or colder

**Handling:** Sonication required. Mix is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | 1,2,3-Trimethylbenzene | 526-73-8 | 8776.10-38 | 99% | 201.6 µg/mL | +/- 9.0835 |
| 2 | Naphthalene | 91-20-3 | STBL1057 | 99% | 200.0 µg/mL | +/- 9.0114 |
| 3 | 2-Methylnaphthalene | 91-57-6 | STBL3028 | 99% | 200.4 µg/mL | +/- 9.0294 |
| 4 | Acenaphthylene | 208-96-8 | 214935V18H | 95% | 199.1 µg/mL | +/- 8.9717 |
| 5 | Acenaphthene | 83-32-9 | MKCR7169 | 99% | 200.4 µg/mL | +/- 9.0294 |
| 6 | Fluorene | 86-73-7 | 10246250 | 98% | 201.5 µg/mL | +/- 9.0784 |
| 7 | Phenanthrene | 85-01-8 | MKCT3391 | 99% | 201.2 µg/mL | +/- 9.0655 |
| 8 | Anthracene | 120-12-7 | 101492T18R | 99% | 200.0 µg/mL | +/- 9.0114 |
| 9 | Fluoranthene | 206-44-0 | MKCQ4728 | 99% | 200.4 µg/mL | +/- 9.0294 |
| 10 | Pyrene | 129-00-0 | BCCK2592 | 99% | 200.0 µg/mL | +/- 9.0114 |
| 11 | Benz(a)anthracene | 56-55-3 | I60012022BAA | 99% | 200.0 µg/mL | +/- 9.0114 |
| 12 | Chrysene | 218-01-9 | RP240627ECS | 99% | 200.4 µg/mL | +/- 9.0294 |
| 13 | Benzo(b)fluoranthene | 205-99-2 | 052013B | 99% | 201.2 µg/mL | +/- 9.0655 |
| 14 | Benzo(k)fluoranthene | 207-08-9 | 012022K | 99% | 201.6 µg/mL | +/- 9.0835 |
| 15 | Benzo(a)pyrene | 50-32-8 | NQLXA | 98% | 199.9 µg/mL | +/- 9.0078 |
| 16 | Indeno(1,2,3-cd)pyrene | 193-39-5 | 12-JKL-118-9 | 97% | 199.0 µg/mL | +/- 8.9683 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 17 | Dibenz(a,h)anthracene | 53-70-3 | 2-ASA-59-1 | 99% | 200.0 | µg/mL | +/- 9.0114 |
| 18 | Benzo(g,h,i)perylene | 191-24-2 | RP240625RSR | 97% | 199.0 | µg/mL | +/- 8.9683 |

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

**Solvent:** Acetone/Toluene (50:50)
**CAS #** 67-64-1/108-88-3
**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:**
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)

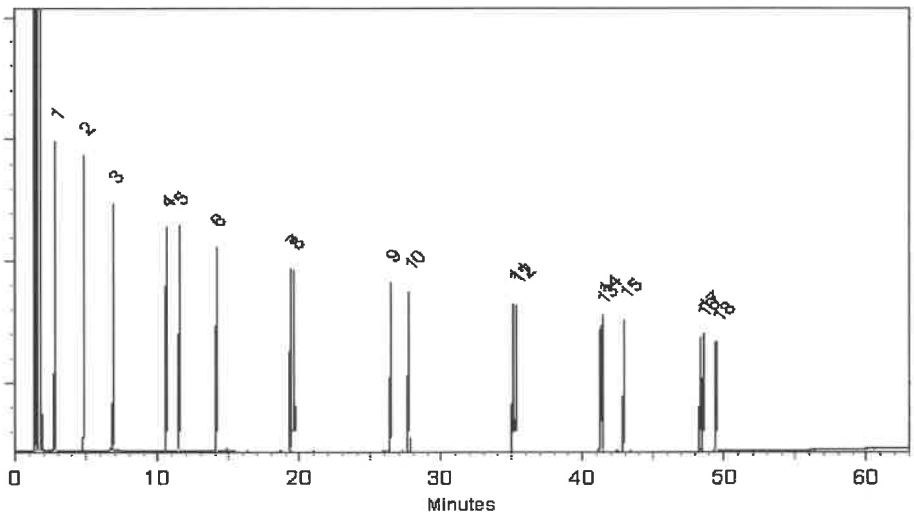
**Inj. Temp:**
250°C

**Det. Temp:**
330°C

**Det. Type:**
FID

**Split Vent:**
20 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.

Rebecca Gingerich - Operations Tech II

**Date Mixed:** 14-Oct-2024 **Balance Serial #** 1128360905

Brittany Federinko - Operations Tech I

**Date Passed:** 21-Oct-2024

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

# General Certified Reference Material Notes

## Expiration Notes:

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

## Purity Notes:

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

## Certified Uncertainty Value Notes:

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

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

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

## Manufacturing Notes:

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

## Handling Notes:

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

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

# Certificate of Analysis

*chromatographic plus*

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

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

**Catalog No. :** 31480 **Lot No.:** A0214879

**Description :** MA Fractionation Surrogate Spike Mix

MA Fractionation Surrogate Spike Mix 4000µg/mL, Hexane, 1mL/ampul

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

**Expiration Date :** July 31, 2030 **Storage:** 10°C or colder

**Handling:** Sonication required. Mix is photosensitive. **Ship:** Ambient

P13743 ↓ P13772 } Y.P. 11/01/24

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | 2-Fluorobiphenyl | 321-60-8 | 00021384 | 99% | 4,009.0 µg/mL | +/- 180.5961 |
| 2 | 2-Bromonaphthalene | 580-13-2 | STBC5362V | 99% | 4,008.5 µg/mL | +/- 180.5736 |

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

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

# Quality Confirmation Test

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

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

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

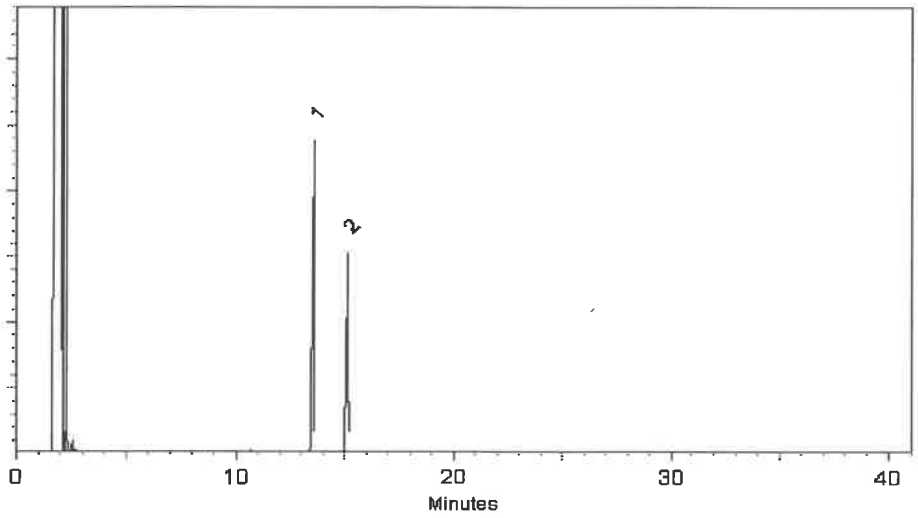
**Inj. Temp:**
250°C

**Det. Temp:**
330°C

**Det. Type:**
FID

**Split Vent:**
2 ml/min.

**Inj. Vol**
1µl




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

Scott McNeil - Operations Tech I

**Date Mixed:** 06-Aug-2024 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

**Date Passed:** 14-Aug-2024

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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

### Certified Uncertainty Value Notes:

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

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

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

### Manufacturing Notes:

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

### Handling Notes:

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

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# 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. :** 31480 **Lot No.:** A0214879

**Description :** MA Fractionation Surrogate Spike Mix

MA Fractionation Surrogate Spike Mix 4000µg/mL, Hexane, 1mL/ampul

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

**Expiration Date :** July 31, 2030 **Storage:** 10°C or colder

**Handling:** Sonication required. Mix is photosensitive. **Ship:** Ambient

P13743 ↓ P13772 } Y.P. 11/01/24

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | 2-Fluorobiphenyl | 321-60-8 | 00021384 | 99% | 4,009.0 µg/mL | +/- 180.5961 |
| 2 | 2-Bromonaphthalene | 580-13-2 | STBC5362V | 99% | 4,008.5 µg/mL | +/- 180.5736 |

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

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

# Quality Confirmation Test

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

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

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

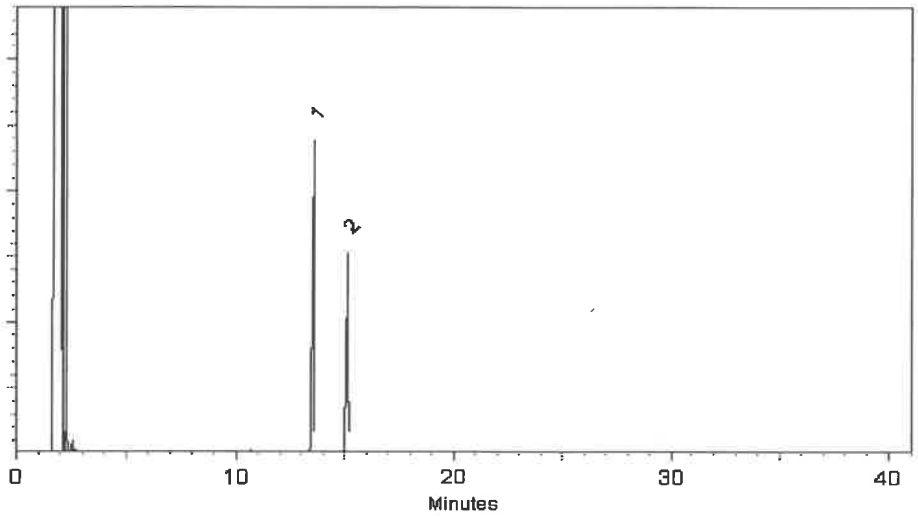
**Inj. Temp:**
250°C

**Det. Temp:**
330°C

**Det. Type:**
FID

**Split Vent:**
2 ml/min.

**Inj. Vol**
1µl




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

Scott McNeil - Operations Tech I

**Date Mixed:** 06-Aug-2024 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

**Date Passed:** 14-Aug-2024

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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

### Certified Uncertainty Value Notes:

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

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

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

### Manufacturing Notes:

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

### Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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# 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. :** 31480 **Lot No.:** A0214879

**Description :** MA Fractionation Surrogate Spike Mix

MA Fractionation Surrogate Spike Mix 4000µg/mL, Hexane, 1mL/ampul

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

**Expiration Date :** July 31, 2030 **Storage:** 10°C or colder

**Handling:** Sonication required. Mix is photosensitive. **Ship:** Ambient

P13743 ↓ P13772 } Y.P. 11/01/24

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | 2-Fluorobiphenyl | 321-60-8 | 00021384 | 99% | 4,009.0 µg/mL | +/- 180.5961 |
| 2 | 2-Bromonaphthalene | 580-13-2 | STBC5362V | 99% | 4,008.5 µg/mL | +/- 180.5736 |

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

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

# Quality Confirmation Test

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

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

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

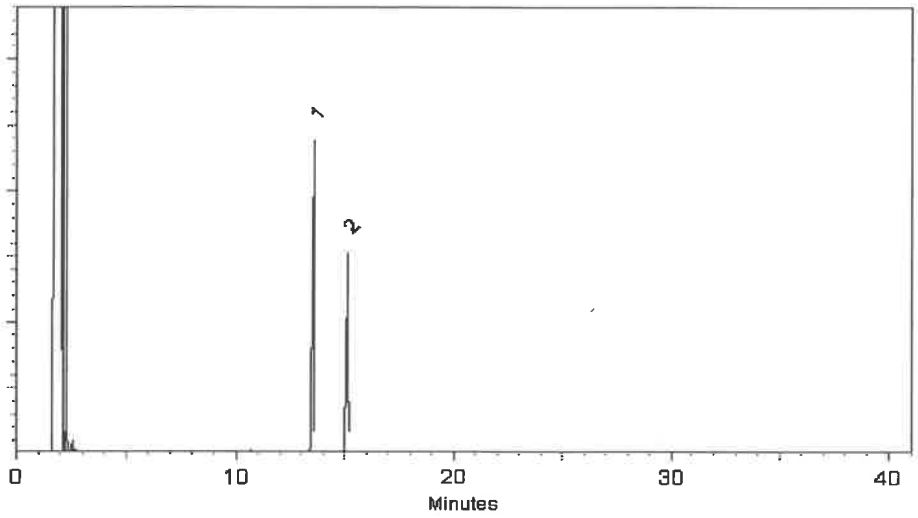
**Inj. Temp:**
250°C

**Det. Temp:**
330°C

**Det. Type:**
FID

**Split Vent:**
2 ml/min.

**Inj. Vol**
1µl




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

Scott McNeil - Operations Tech I

**Date Mixed:** 06-Aug-2024 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

**Date Passed:** 14-Aug-2024

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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

### Certified Uncertainty Value Notes:

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

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

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

### Manufacturing Notes:

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

### Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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# 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. :** 31480 **Lot No.:** A0214879

**Description :** MA Fractionation Surrogate Spike Mix

MA Fractionation Surrogate Spike Mix 4000µg/mL, Hexane, 1mL/ampul

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

**Expiration Date :** July 31, 2030 **Storage:** 10°C or colder

**Handling:** Sonication required. Mix is photosensitive. **Ship:** Ambient

P13743 ↓ P13772 } Y.P. 11/01/24

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | 2-Fluorobiphenyl | 321-60-8 | 00021384 | 99% | 4,009.0 µg/mL | +/- 180.5961 |
| 2 | 2-Bromonaphthalene | 580-13-2 | STBC5362V | 99% | 4,008.5 µg/mL | +/- 180.5736 |

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

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

# Quality Confirmation Test

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

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

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

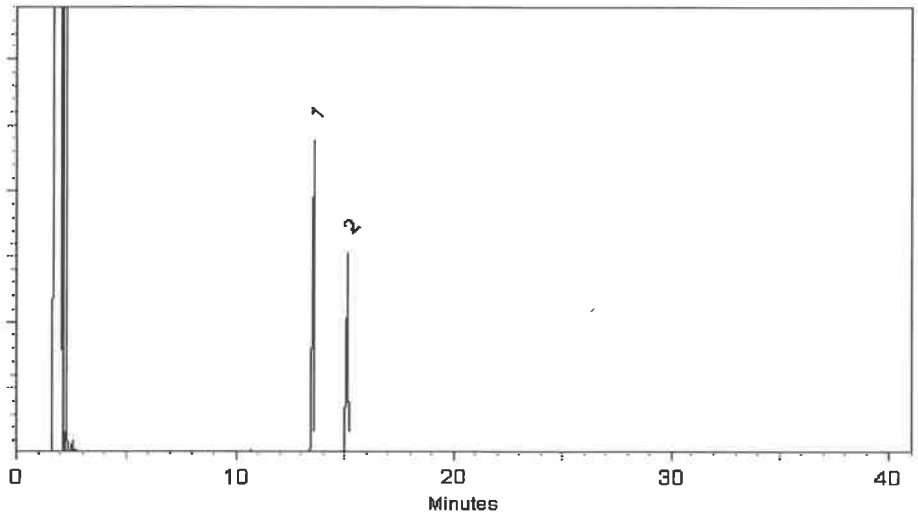
**Inj. Temp:**
250°C

**Det. Temp:**
330°C

**Det. Type:**
FID

**Split Vent:**
2 ml/min.

**Inj. Vol**
1µl




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

Scott McNeil - Operations Tech I

**Date Mixed:** 06-Aug-2024 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

**Date Passed:** 14-Aug-2024

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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

### Certified Uncertainty Value Notes:

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

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

### Manufacturing Notes:

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

### Handling Notes:

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CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

*chromatographic plus*

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

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

**Catalog No. :** 30542 **Lot No.:** A0217408

**Description :** NJEPH Aliphatics Matrix Spike Mix

NJEPH Aliphatics Matrix Spike Mix 200 µg/mL, n-Pentane, 5mL/ampul

**Container Size :** 5 mL **Pkg Amt:** > 5 mL

**Expiration Date :** November 30, 2031 **Storage:** 10°C or colder

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

P13800 ↓ P13889 } Y.P. 12/09/24

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | n-Nonane (C9) | 111-84-2 | SHBP9752 | 99% | 200.7 µg/mL | +/- 5.1839 |
| 2 | n-Decane (C10) | 124-18-5 | SHBQ1342 | 99% | 201.0 µg/mL | +/- 5.1917 |
| 3 | n-Dodecane (C12) | 112-40-3 | SHBP7054 | 99% | 200.5 µg/mL | +/- 5.1805 |
| 4 | n-Tetradecane (C14) | 629-59-4 | STBL0465 | 99% | 200.5 µg/mL | +/- 5.1805 |
| 5 | n-Hexadecane (C16) | 544-76-3 | SHBR0669 | 99% | 200.7 µg/mL | +/- 5.1857 |
| 6 | n-Octadecane (C18) | 593-45-3 | UE5NG | 99% | 200.7 µg/mL | +/- 5.1857 |
| 7 | n-Eicosane (C20) | 112-95-8 | MKCN8767 | 97% | 200.9 µg/mL | +/- 5.1888 |
| 8 | n-Heneicosane (C21) | 629-94-7 | MKCP1960 | 99% | 200.5 µg/mL | +/- 5.1805 |
| 9 | n-Docosane (C22) | 629-97-0 | MKCQ3882 | 99% | 200.5 µg/mL | +/- 5.1788 |
| 10 | n-Tetracosane (C24) | 646-31-1 | MKCS9978 | 99% | 200.6 µg/mL | +/- 5.1822 |
| 11 | n-Hexacosane (C26) | 630-01-3 | MKCQ4814 | 99% | 200.5 µg/mL | +/- 5.1796 |
| 12 | n-Octacosane (C28) | 630-02-4 | BCCJ4566 | 99% | 200.6 µg/mL | +/- 5.1822 |
| 13 | n-Triacontane (C30) | 638-68-6 | MKCV7007 | 98% | 201.1 µg/mL | +/- 5.1942 |
| 14 | n-Dotriacontane (C32) | 544-85-4 | BCBW0661 | 99% | 200.9 µg/mL | +/- 5.1891 |
| 15 | n-Tetratriacontane (C34) | 14167-59-0 | 6JNHB | 99% | 200.8 µg/mL | +/- 5.1865 |
| 16 | n-Hexatriacontane (C36) | 630-06-8 | Z27H018 | 99% | 200.6 µg/mL | +/- 5.1814 |
| 17 | n-Octatriacontane (C38) | 7194-85-6 | 0000207852 | 96% | 199.3 µg/mL | +/- 5.1477 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 18 | n-Tetracontane (C40) | 4181-95-7 | OKEGA | 99% | 201.0 µg/mL | +/- 5.1917 |

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

**Solvent:** n-Pentane
**CAS #** 109-66-0
**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.)

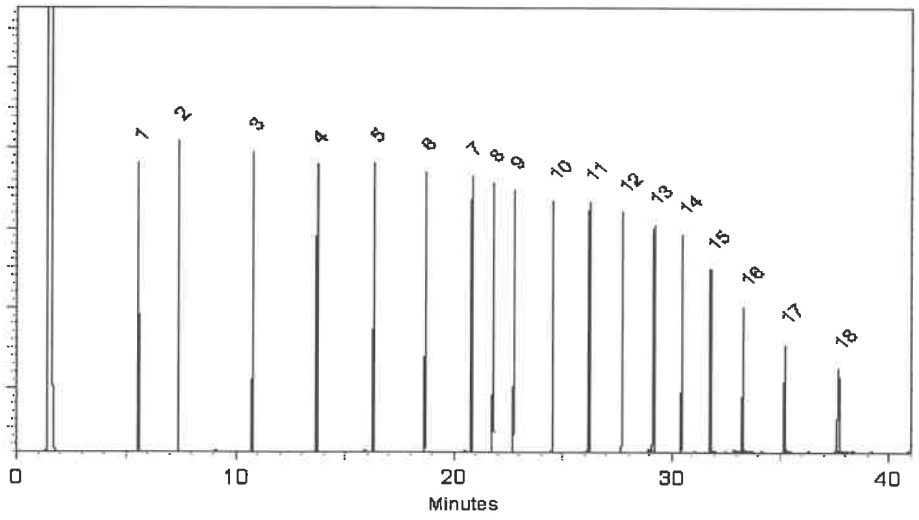
**Inj. Temp:**
250°C

**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.

Penelope Riglin - Operations Tech I

**Date Mixed:** 03-Oct-2024 **Balance Serial #** 1128353505

Jennifer Pollino - Operations Tech III - ARM QC

**Date Passed:** 07-Oct-2024

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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

### Certified Uncertainty Value Notes:

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

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

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

### Manufacturing Notes:

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

### Handling Notes:

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

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

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CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

*chromatographic plus*

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

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

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

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

**Catalog No. :** 30542 **Lot No.:** A0217408

**Description :** NJEPH Aliphatics Matrix Spike Mix

NJEPH Aliphatics Matrix Spike Mix 200 µg/mL, n-Pentane, 5mL/ampul

**Container Size :** 5 mL **Pkg Amt:** > 5 mL

**Expiration Date :** November 30, 2031 **Storage:** 10°C or colder

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

P13800 ↓ P13859 } Y.P. 12/09/24

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | n-Nonane (C9) | 111-84-2 | SHBP9752 | 99% | 200.7 µg/mL | +/- 5.1839 |
| 2 | n-Decane (C10) | 124-18-5 | SHBQ1342 | 99% | 201.0 µg/mL | +/- 5.1917 |
| 3 | n-Dodecane (C12) | 112-40-3 | SHBP7054 | 99% | 200.5 µg/mL | +/- 5.1805 |
| 4 | n-Tetradecane (C14) | 629-59-4 | STBL0465 | 99% | 200.5 µg/mL | +/- 5.1805 |
| 5 | n-Hexadecane (C16) | 544-76-3 | SHBR0669 | 99% | 200.7 µg/mL | +/- 5.1857 |
| 6 | n-Octadecane (C18) | 593-45-3 | UE5NG | 99% | 200.7 µg/mL | +/- 5.1857 |
| 7 | n-Eicosane (C20) | 112-95-8 | MKCN8767 | 97% | 200.9 µg/mL | +/- 5.1888 |
| 8 | n-Heneicosane (C21) | 629-94-7 | MKCP1960 | 99% | 200.5 µg/mL | +/- 5.1805 |
| 9 | n-Docosane (C22) | 629-97-0 | MKCQ3882 | 99% | 200.5 µg/mL | +/- 5.1788 |
| 10 | n-Tetracosane (C24) | 646-31-1 | MKCS9978 | 99% | 200.6 µg/mL | +/- 5.1822 |
| 11 | n-Hexacosane (C26) | 630-01-3 | MKCQ4814 | 99% | 200.5 µg/mL | +/- 5.1796 |
| 12 | n-Octacosane (C28) | 630-02-4 | BCCJ4566 | 99% | 200.6 µg/mL | +/- 5.1822 |
| 13 | n-Triacontane (C30) | 638-68-6 | MKCV7007 | 98% | 201.1 µg/mL | +/- 5.1942 |
| 14 | n-Dotriacontane (C32) | 544-85-4 | BCBW0661 | 99% | 200.9 µg/mL | +/- 5.1891 |
| 15 | n-Tetratriacontane (C34) | 14167-59-0 | 6JNHB | 99% | 200.8 µg/mL | +/- 5.1865 |
| 16 | n-Hexatriacontane (C36) | 630-06-8 | Z27H018 | 99% | 200.6 µg/mL | +/- 5.1814 |
| 17 | n-Octatriacontane (C38) | 7194-85-6 | 0000207852 | 96% | 199.3 µg/mL | +/- 5.1477 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 18 | n-Tetracontane (C40) | 4181-95-7 | OKEGA | 99% | 201.0 µg/mL | +/- 5.1917 |

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

**Solvent:** n-Pentane
**CAS #** 109-66-0
**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.)

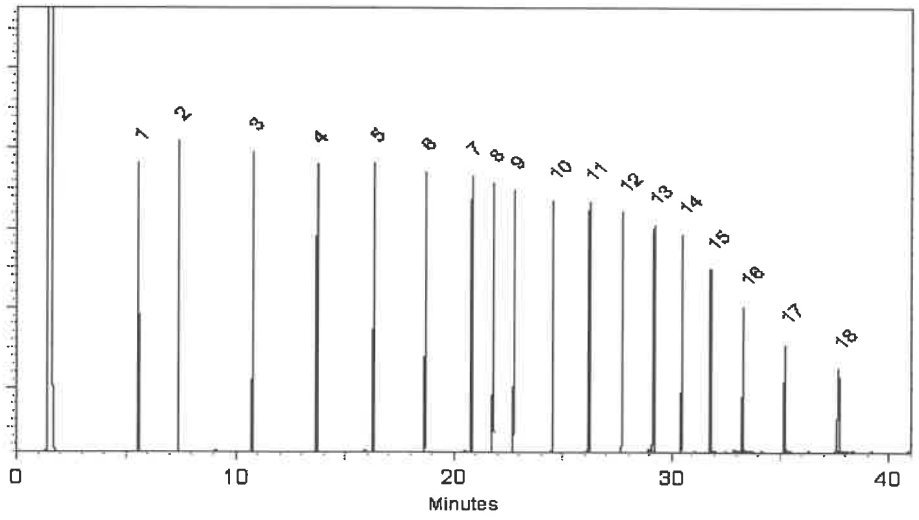
**Inj. Temp:**
250°C

**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.

Penelope Riglin - Operations Tech I

**Date Mixed:** 03-Oct-2024 **Balance Serial #** 1128353505

Jennifer Pollino - Operations Tech III - ARM QC

**Date Passed:** 07-Oct-2024

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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

### Certified Uncertainty Value Notes:

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

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

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

### Manufacturing Notes:

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

### Handling Notes:

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

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Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

*chromatographic plus*

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

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

**Catalog No. :** 30542 **Lot No.:** A0217408

**Description :** NJEPH Aliphatics Matrix Spike Mix

NJEPH Aliphatics Matrix Spike Mix 200 µg/mL, n-Pentane, 5mL/ampul

**Container Size :** 5 mL **Pkg Amt:** > 5 mL

**Expiration Date :** November 30, 2031 **Storage:** 10°C or colder

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

P13800
↓
P13889
} Y.P. 12/09/24

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | n-Nonane (C9) | 111-84-2 | SHBP9752 | 99% | 200.7 µg/mL | +/- 5.1839 |
| 2 | n-Decane (C10) | 124-18-5 | SHBQ1342 | 99% | 201.0 µg/mL | +/- 5.1917 |
| 3 | n-Dodecane (C12) | 112-40-3 | SHBP7054 | 99% | 200.5 µg/mL | +/- 5.1805 |
| 4 | n-Tetradecane (C14) | 629-59-4 | STBL0465 | 99% | 200.5 µg/mL | +/- 5.1805 |
| 5 | n-Hexadecane (C16) | 544-76-3 | SHBR0669 | 99% | 200.7 µg/mL | +/- 5.1857 |
| 6 | n-Octadecane (C18) | 593-45-3 | UE5NG | 99% | 200.7 µg/mL | +/- 5.1857 |
| 7 | n-Eicosane (C20) | 112-95-8 | MKCN8767 | 97% | 200.9 µg/mL | +/- 5.1888 |
| 8 | n-Heneicosane (C21) | 629-94-7 | MKCP1960 | 99% | 200.5 µg/mL | +/- 5.1805 |
| 9 | n-Docosane (C22) | 629-97-0 | MKCQ3882 | 99% | 200.5 µg/mL | +/- 5.1788 |
| 10 | n-Tetracosane (C24) | 646-31-1 | MKCS9978 | 99% | 200.6 µg/mL | +/- 5.1822 |
| 11 | n-Hexacosane (C26) | 630-01-3 | MKCQ4814 | 99% | 200.5 µg/mL | +/- 5.1796 |
| 12 | n-Octacosane (C28) | 630-02-4 | BCCJ4566 | 99% | 200.6 µg/mL | +/- 5.1822 |
| 13 | n-Triacontane (C30) | 638-68-6 | MKCV7007 | 98% | 201.1 µg/mL | +/- 5.1942 |
| 14 | n-Dotriacontane (C32) | 544-85-4 | BCBW0661 | 99% | 200.9 µg/mL | +/- 5.1891 |
| 15 | n-Tetratriacontane (C34) | 14167-59-0 | 6JNHB | 99% | 200.8 µg/mL | +/- 5.1865 |
| 16 | n-Hexatriacontane (C36) | 630-06-8 | Z27H018 | 99% | 200.6 µg/mL | +/- 5.1814 |
| 17 | n-Octatriacontane (C38) | 7194-85-6 | 0000207852 | 96% | 199.3 µg/mL | +/- 5.1477 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 18 | n-Tetracontane (C40) | 4181-95-7 | OKEGA | 99% | 201.0 µg/mL | +/- 5.1917 |

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

**Solvent:** n-Pentane
**CAS #** 109-66-0
**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.)

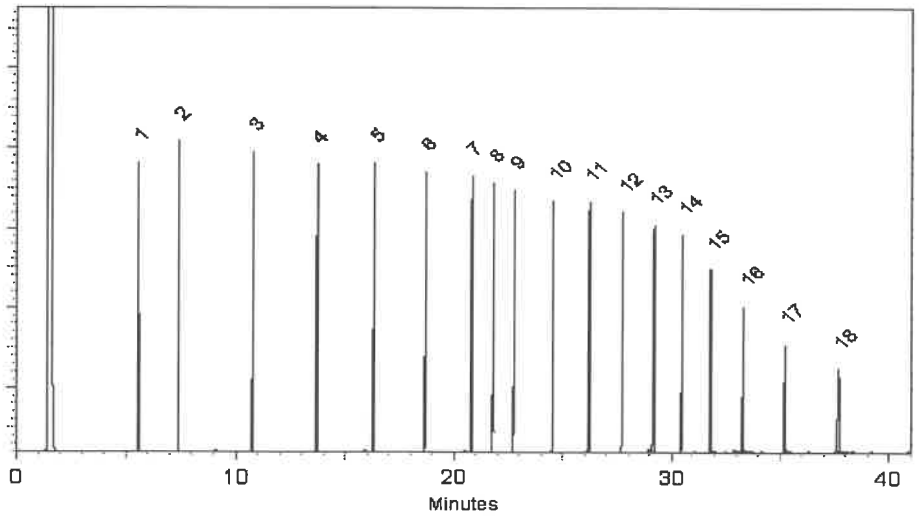
**Inj. Temp:**
250°C

**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.

Penelope Riglin - Operations Tech I

**Date Mixed:** 03-Oct-2024 **Balance Serial #** 1128353505

Jennifer Pollino - Operations Tech III - ARM QC

**Date Passed:** 07-Oct-2024

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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

### Certified Uncertainty Value Notes:

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

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

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

### Manufacturing Notes:

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

### Handling Notes:

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

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Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

*chromatographic plus*

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

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

**Catalog No. :** 30542 **Lot No.:** A0217408

**Description :** NJEPH Aliphatics Matrix Spike Mix

NJEPH Aliphatics Matrix Spike Mix 200 µg/mL, n-Pentane, 5mL/ampul

**Container Size :** 5 mL **Pkg Amt:** > 5 mL

**Expiration Date :** November 30, 2031 **Storage:** 10°C or colder

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

P13800 ↓ P13859 } Y.P. 12/09/24

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | n-Nonane (C9) | 111-84-2 | SHBP9752 | 99% | 200.7 µg/mL | +/- 5.1839 |
| 2 | n-Decane (C10) | 124-18-5 | SHBQ1342 | 99% | 201.0 µg/mL | +/- 5.1917 |
| 3 | n-Dodecane (C12) | 112-40-3 | SHBP7054 | 99% | 200.5 µg/mL | +/- 5.1805 |
| 4 | n-Tetradecane (C14) | 629-59-4 | STBL0465 | 99% | 200.5 µg/mL | +/- 5.1805 |
| 5 | n-Hexadecane (C16) | 544-76-3 | SHBR0669 | 99% | 200.7 µg/mL | +/- 5.1857 |
| 6 | n-Octadecane (C18) | 593-45-3 | UE5NG | 99% | 200.7 µg/mL | +/- 5.1857 |
| 7 | n-Eicosane (C20) | 112-95-8 | MKCN8767 | 97% | 200.9 µg/mL | +/- 5.1888 |
| 8 | n-Heneicosane (C21) | 629-94-7 | MKCP1960 | 99% | 200.5 µg/mL | +/- 5.1805 |
| 9 | n-Docosane (C22) | 629-97-0 | MKCQ3882 | 99% | 200.5 µg/mL | +/- 5.1788 |
| 10 | n-Tetracosane (C24) | 646-31-1 | MKCS9978 | 99% | 200.6 µg/mL | +/- 5.1822 |
| 11 | n-Hexacosane (C26) | 630-01-3 | MKCQ4814 | 99% | 200.5 µg/mL | +/- 5.1796 |
| 12 | n-Octacosane (C28) | 630-02-4 | BCCJ4566 | 99% | 200.6 µg/mL | +/- 5.1822 |
| 13 | n-Triacontane (C30) | 638-68-6 | MKCV7007 | 98% | 201.1 µg/mL | +/- 5.1942 |
| 14 | n-Dotriacontane (C32) | 544-85-4 | BCBW0661 | 99% | 200.9 µg/mL | +/- 5.1891 |
| 15 | n-Tetratriacontane (C34) | 14167-59-0 | 6JNHB | 99% | 200.8 µg/mL | +/- 5.1865 |
| 16 | n-Hexatriacontane (C36) | 630-06-8 | Z27H018 | 99% | 200.6 µg/mL | +/- 5.1814 |
| 17 | n-Octatriacontane (C38) | 7194-85-6 | 0000207852 | 96% | 199.3 µg/mL | +/- 5.1477 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 18 | n-Tetracontane (C40) | 4181-95-7 | OKEGA | 99% | 201.0 µg/mL | +/- 5.1917 |

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

**Solvent:** n-Pentane
**CAS #** 109-66-0
**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.)

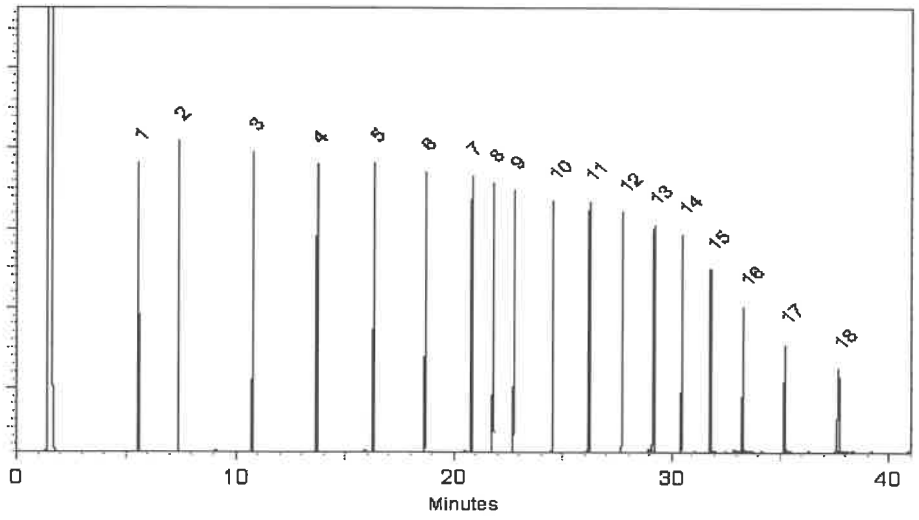
**Inj. Temp:**
250°C

**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.

Penelope Riglin - Operations Tech I

**Date Mixed:** 03-Oct-2024 **Balance Serial #** 1128353505

Jennifer Pollino - Operations Tech III - ARM QC

**Date Passed:** 07-Oct-2024

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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

### Certified Uncertainty Value Notes:

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

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

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

### Manufacturing Notes:

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

### Handling Notes:

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

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

*chromatographic plus*

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

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

**Catalog No. :** 30543 **Lot No.:** A0217838

**Description :** NJEPH Aromatics Matrix Spike Mix

NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

P13835 & P13860 Y.P. 12/09/24

**Container Size :** 5 mL **Pkg Amt:** > 5 mL

**Expiration Date :** September 30, 2030 **Storage:** 10°C or colder

**Handling:** Sonication required. Mix is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | 1,2,3-Trimethylbenzene | 526-73-8 | 8776.10-38 | 99% | 201.6 µg/mL | +/- 9.0835 |
| 2 | Naphthalene | 91-20-3 | STBL1057 | 99% | 200.0 µg/mL | +/- 9.0114 |
| 3 | 2-Methylnaphthalene | 91-57-6 | STBL3028 | 99% | 200.4 µg/mL | +/- 9.0294 |
| 4 | Acenaphthylene | 208-96-8 | 214935V18H | 95% | 199.1 µg/mL | +/- 8.9717 |
| 5 | Acenaphthene | 83-32-9 | MKCR7169 | 99% | 200.4 µg/mL | +/- 9.0294 |
| 6 | Fluorene | 86-73-7 | 10246250 | 98% | 201.5 µg/mL | +/- 9.0784 |
| 7 | Phenanthrene | 85-01-8 | MKCT3391 | 99% | 201.2 µg/mL | +/- 9.0655 |
| 8 | Anthracene | 120-12-7 | 101492T18R | 99% | 200.0 µg/mL | +/- 9.0114 |
| 9 | Fluoranthene | 206-44-0 | MKCQ4728 | 99% | 200.4 µg/mL | +/- 9.0294 |
| 10 | Pyrene | 129-00-0 | BCCK2592 | 99% | 200.0 µg/mL | +/- 9.0114 |
| 11 | Benz(a)anthracene | 56-55-3 | I60012022BAA | 99% | 200.0 µg/mL | +/- 9.0114 |
| 12 | Chrysene | 218-01-9 | RP240627ECS | 99% | 200.4 µg/mL | +/- 9.0294 |
| 13 | Benzo(b)fluoranthene | 205-99-2 | 052013B | 99% | 201.2 µg/mL | +/- 9.0655 |
| 14 | Benzo(k)fluoranthene | 207-08-9 | 012022K | 99% | 201.6 µg/mL | +/- 9.0835 |
| 15 | Benzo(a)pyrene | 50-32-8 | NQLXA | 98% | 199.9 µg/mL | +/- 9.0078 |
| 16 | Indeno(1,2,3-cd)pyrene | 193-39-5 | 12-JKL-118-9 | 97% | 199.0 µg/mL | +/- 8.9683 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 17 | Dibenz(a,h)anthracene | 53-70-3 | 2-ASA-59-1 | 99% | 200.0 | µg/mL | +/- 9.0114 |
| 18 | Benzo(g,h,i)perylene | 191-24-2 | RP240625RSR | 97% | 199.0 | µg/mL | +/- 8.9683 |

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

**Solvent:** Acetone/Toluene (50:50)
**CAS #** 67-64-1/108-88-3
**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:**
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)

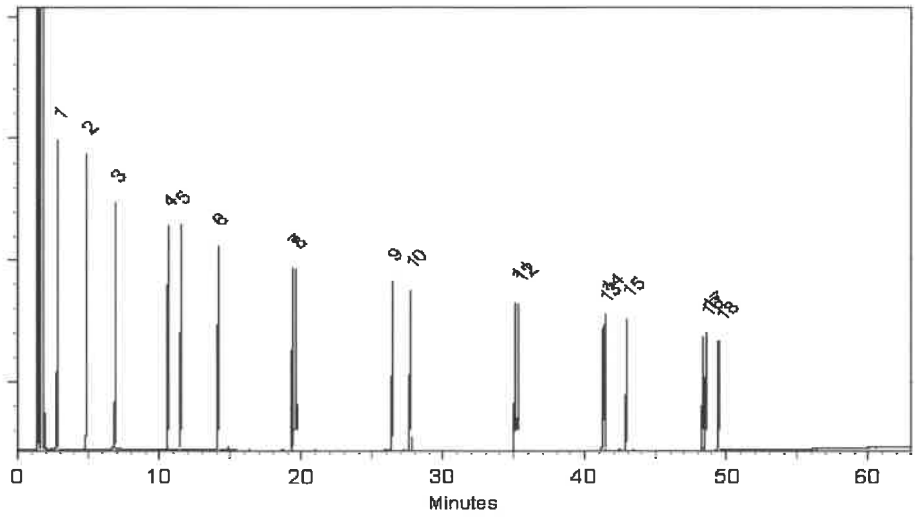
**Inj. Temp:**
250°C

**Det. Temp:**
330°C

**Det. Type:**
FID

**Split Vent:**
20 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.

Rebecca Gingerich - Operations Tech II

**Date Mixed:** 14-Oct-2024 **Balance Serial #** 1128360905

Brittany Federinko - Operations Tech I

**Date Passed:** 21-Oct-2024

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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

### Certified Uncertainty Value Notes:

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

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

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

### Manufacturing Notes:

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

### Handling Notes:

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

# Certificate of Analysis

*chromatographic plus*

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

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

**Catalog No. :** 30543 **Lot No.:** A0217838

**Description :** NJEPH Aromatics Matrix Spike Mix

NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

P13835 & P13860 Y.P. 12/09/24

**Container Size :** 5 mL **Pkg Amt:** > 5 mL

**Expiration Date :** September 30, 2030 **Storage:** 10°C or colder

**Handling:** Sonication required. Mix is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | 1,2,3-Trimethylbenzene | 526-73-8 | 8776.10-38 | 99% | 201.6 µg/mL | +/- 9.0835 |
| 2 | Naphthalene | 91-20-3 | STBL1057 | 99% | 200.0 µg/mL | +/- 9.0114 |
| 3 | 2-Methylnaphthalene | 91-57-6 | STBL3028 | 99% | 200.4 µg/mL | +/- 9.0294 |
| 4 | Acenaphthylene | 208-96-8 | 214935V18H | 95% | 199.1 µg/mL | +/- 8.9717 |
| 5 | Acenaphthene | 83-32-9 | MKCR7169 | 99% | 200.4 µg/mL | +/- 9.0294 |
| 6 | Fluorene | 86-73-7 | 10246250 | 98% | 201.5 µg/mL | +/- 9.0784 |
| 7 | Phenanthrene | 85-01-8 | MKCT3391 | 99% | 201.2 µg/mL | +/- 9.0655 |
| 8 | Anthracene | 120-12-7 | 101492T18R | 99% | 200.0 µg/mL | +/- 9.0114 |
| 9 | Fluoranthene | 206-44-0 | MKCQ4728 | 99% | 200.4 µg/mL | +/- 9.0294 |
| 10 | Pyrene | 129-00-0 | BCCK2592 | 99% | 200.0 µg/mL | +/- 9.0114 |
| 11 | Benz(a)anthracene | 56-55-3 | I60012022BAA | 99% | 200.0 µg/mL | +/- 9.0114 |
| 12 | Chrysene | 218-01-9 | RP240627ECS | 99% | 200.4 µg/mL | +/- 9.0294 |
| 13 | Benzo(b)fluoranthene | 205-99-2 | 052013B | 99% | 201.2 µg/mL | +/- 9.0655 |
| 14 | Benzo(k)fluoranthene | 207-08-9 | 012022K | 99% | 201.6 µg/mL | +/- 9.0835 |
| 15 | Benzo(a)pyrene | 50-32-8 | NQLXA | 98% | 199.9 µg/mL | +/- 9.0078 |
| 16 | Indeno(1,2,3-cd)pyrene | 193-39-5 | 12-JKL-118-9 | 97% | 199.0 µg/mL | +/- 8.9683 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 17 | Dibenz(a,h)anthracene | 53-70-3 | 2-ASA-59-1 | 99% | 200.0 | µg/mL | +/- 9.0114 |
| 18 | Benzo(g,h,i)perylene | 191-24-2 | RP240625RSR | 97% | 199.0 | µg/mL | +/- 8.9683 |

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

**Solvent:** Acetone/Toluene (50:50)
**CAS #** 67-64-1/108-88-3
**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:**
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)

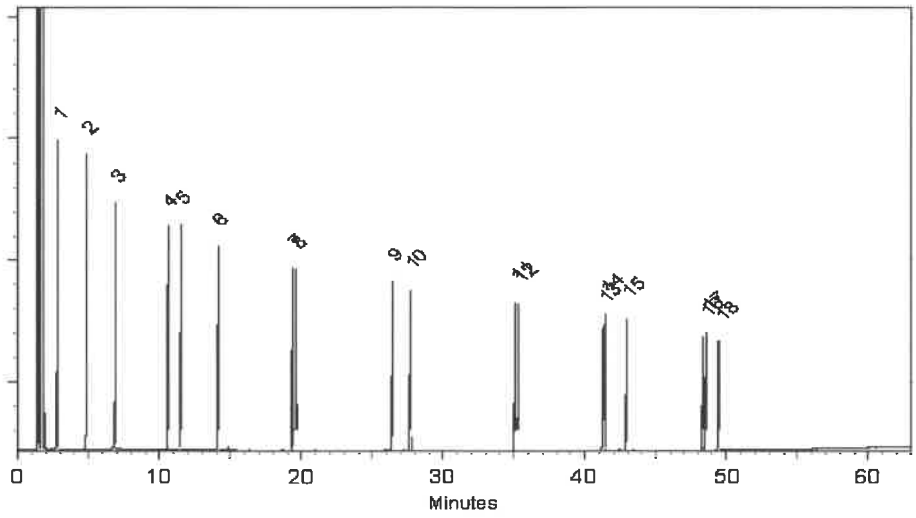
**Inj. Temp:**
250°C

**Det. Temp:**
330°C

**Det. Type:**
FID

**Split Vent:**
20 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.

Rebecca Gingerich - Operations Tech II

**Date Mixed:** 14-Oct-2024 **Balance Serial #** 1128360905

Brittany Federinko - Operations Tech I

**Date Passed:** 21-Oct-2024

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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

### Certified Uncertainty Value Notes:

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

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  $k$ 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.
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## CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

***chromatographic plus***

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

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

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

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

**Catalog No. :** 30543 **Lot No.:** A0217838

**Description :** NJEPH Aromatics Matrix Spike Mix

NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

P13835 & P13860 Y.P. 12/09/24

**Container Size :** 5 mL **Pkg Amt:** > 5 mL

**Expiration Date :** September 30, 2030 **Storage:** 10°C or colder

**Handling:** Sonication required. Mix is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | 1,2,3-Trimethylbenzene | 526-73-8 | 8776.10-38 | 99% | 201.6 µg/mL | +/- 9.0835 |
| 2 | Naphthalene | 91-20-3 | STBL1057 | 99% | 200.0 µg/mL | +/- 9.0114 |
| 3 | 2-Methylnaphthalene | 91-57-6 | STBL3028 | 99% | 200.4 µg/mL | +/- 9.0294 |
| 4 | Acenaphthylene | 208-96-8 | 214935V18H | 95% | 199.1 µg/mL | +/- 8.9717 |
| 5 | Acenaphthene | 83-32-9 | MKCR7169 | 99% | 200.4 µg/mL | +/- 9.0294 |
| 6 | Fluorene | 86-73-7 | 10246250 | 98% | 201.5 µg/mL | +/- 9.0784 |
| 7 | Phenanthrene | 85-01-8 | MKCT3391 | 99% | 201.2 µg/mL | +/- 9.0655 |
| 8 | Anthracene | 120-12-7 | 101492T18R | 99% | 200.0 µg/mL | +/- 9.0114 |
| 9 | Fluoranthene | 206-44-0 | MKCQ4728 | 99% | 200.4 µg/mL | +/- 9.0294 |
| 10 | Pyrene | 129-00-0 | BCCK2592 | 99% | 200.0 µg/mL | +/- 9.0114 |
| 11 | Benz(a)anthracene | 56-55-3 | I60012022BAA | 99% | 200.0 µg/mL | +/- 9.0114 |
| 12 | Chrysene | 218-01-9 | RP240627ECS | 99% | 200.4 µg/mL | +/- 9.0294 |
| 13 | Benzo(b)fluoranthene | 205-99-2 | 052013B | 99% | 201.2 µg/mL | +/- 9.0655 |
| 14 | Benzo(k)fluoranthene | 207-08-9 | 012022K | 99% | 201.6 µg/mL | +/- 9.0835 |
| 15 | Benzo(a)pyrene | 50-32-8 | NQLXA | 98% | 199.9 µg/mL | +/- 9.0078 |
| 16 | Indeno(1,2,3-cd)pyrene | 193-39-5 | 12-JKL-118-9 | 97% | 199.0 µg/mL | +/- 8.9683 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 17 | Dibenz(a,h)anthracene | 53-70-3 | 2-ASA-59-1 | 99% | 200.0 | µg/mL | +/- 9.0114 |
| 18 | Benzo(g,h,i)perylene | 191-24-2 | RP240625RSR | 97% | 199.0 | µg/mL | +/- 8.9683 |

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

**Solvent:** Acetone/Toluene (50:50)
**CAS #** 67-64-1/108-88-3
**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:**
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)

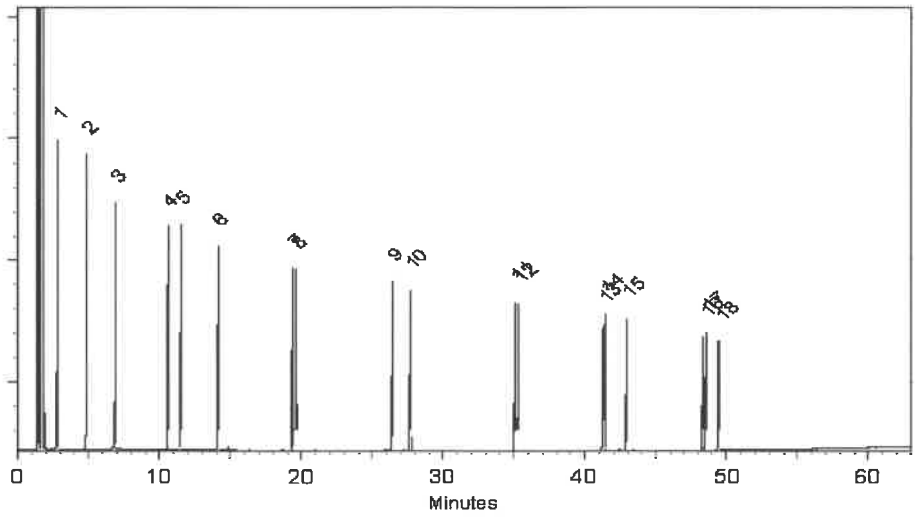
**Inj. Temp:**
250°C

**Det. Temp:**
330°C

**Det. Type:**
FID

**Split Vent:**
20 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.

Rebecca Gingerich - Operations Tech II

**Date Mixed:** 14-Oct-2024 **Balance Serial #** 1128360905

Brittany Federinko - Operations Tech I

**Date Passed:** 21-Oct-2024

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

## General Certified Reference Material Notes

### Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
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### Certified Uncertainty Value Notes:

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### Manufacturing Notes:

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

### Handling Notes:

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**Catalog No. :** 30543 **Lot No.:** A0217838

**Description :** NJEPH Aromatics Matrix Spike Mix

NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

P13835 & P13860 Y.P. 12/09/24

**Container Size :** 5 mL **Pkg Amt:** > 5 mL

**Expiration Date :** September 30, 2030 **Storage:** 10°C or colder

**Handling:** Sonication required. Mix is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
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| 2 | Naphthalene | 91-20-3 | STBL1057 | 99% | 200.0 µg/mL | +/- 9.0114 |
| 3 | 2-Methylnaphthalene | 91-57-6 | STBL3028 | 99% | 200.4 µg/mL | +/- 9.0294 |
| 4 | Acenaphthylene | 208-96-8 | 214935V18H | 95% | 199.1 µg/mL | +/- 8.9717 |
| 5 | Acenaphthene | 83-32-9 | MKCR7169 | 99% | 200.4 µg/mL | +/- 9.0294 |
| 6 | Fluorene | 86-73-7 | 10246250 | 98% | 201.5 µg/mL | +/- 9.0784 |
| 7 | Phenanthrene | 85-01-8 | MKCT3391 | 99% | 201.2 µg/mL | +/- 9.0655 |
| 8 | Anthracene | 120-12-7 | 101492T18R | 99% | 200.0 µg/mL | +/- 9.0114 |
| 9 | Fluoranthene | 206-44-0 | MKCQ4728 | 99% | 200.4 µg/mL | +/- 9.0294 |
| 10 | Pyrene | 129-00-0 | BCCK2592 | 99% | 200.0 µg/mL | +/- 9.0114 |
| 11 | Benz(a)anthracene | 56-55-3 | I60012022BAA | 99% | 200.0 µg/mL | +/- 9.0114 |
| 12 | Chrysene | 218-01-9 | RP240627ECS | 99% | 200.4 µg/mL | +/- 9.0294 |
| 13 | Benzo(b)fluoranthene | 205-99-2 | 052013B | 99% | 201.2 µg/mL | +/- 9.0655 |
| 14 | Benzo(k)fluoranthene | 207-08-9 | 012022K | 99% | 201.6 µg/mL | +/- 9.0835 |
| 15 | Benzo(a)pyrene | 50-32-8 | NQLXA | 98% | 199.9 µg/mL | +/- 9.0078 |
| 16 | Indeno(1,2,3-cd)pyrene | 193-39-5 | 12-JKL-118-9 | 97% | 199.0 µg/mL | +/- 8.9683 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 17 | Dibenz(a,h)anthracene | 53-70-3 | 2-ASA-59-1 | 99% | 200.0 | µg/mL | +/- 9.0114 |
| 18 | Benzo(g,h,i)perylene | 191-24-2 | RP240625RSR | 97% | 199.0 | µg/mL | +/- 8.9683 |

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

**Solvent:** Acetone/Toluene (50:50)
**CAS #** 67-64-1/108-88-3
**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:**
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)

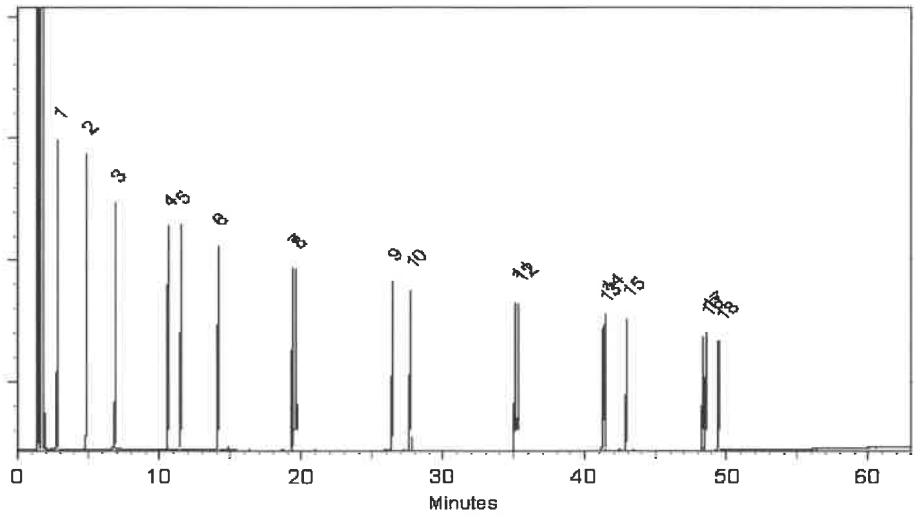
**Inj. Temp:**
250°C

**Det. Temp:**
330°C

**Det. Type:**
FID

**Split Vent:**
20 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.

Rebecca Gingerich - Operations Tech II

**Date Mixed:** 14-Oct-2024 **Balance Serial #** 1128360905

Brittany Federinko - Operations Tech I

**Date Passed:** 21-Oct-2024

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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

### Certified Uncertainty Value Notes:

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

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

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

### Manufacturing Notes:

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

### Handling Notes:

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

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Fax: 1-814-353-1309

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## CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

***chromatographic plus***

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

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

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

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

**Catalog No. :** 30543 **Lot No.:** A0217838

**Description :** NJEPH Aromatics Matrix Spike Mix

NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

P13835 & P13860 Y.P. 12/09/24

**Container Size :** 5 mL **Pkg Amt:** > 5 mL

**Expiration Date :** September 30, 2030 **Storage:** 10°C or colder

**Handling:** Sonication required. Mix is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | 1,2,3-Trimethylbenzene | 526-73-8 | 8776.10-38 | 99% | 201.6 µg/mL | +/- 9.0835 |
| 2 | Naphthalene | 91-20-3 | STBL1057 | 99% | 200.0 µg/mL | +/- 9.0114 |
| 3 | 2-Methylnaphthalene | 91-57-6 | STBL3028 | 99% | 200.4 µg/mL | +/- 9.0294 |
| 4 | Acenaphthylene | 208-96-8 | 214935V18H | 95% | 199.1 µg/mL | +/- 8.9717 |
| 5 | Acenaphthene | 83-32-9 | MKCR7169 | 99% | 200.4 µg/mL | +/- 9.0294 |
| 6 | Fluorene | 86-73-7 | 10246250 | 98% | 201.5 µg/mL | +/- 9.0784 |
| 7 | Phenanthrene | 85-01-8 | MKCT3391 | 99% | 201.2 µg/mL | +/- 9.0655 |
| 8 | Anthracene | 120-12-7 | 101492T18R | 99% | 200.0 µg/mL | +/- 9.0114 |
| 9 | Fluoranthene | 206-44-0 | MKCQ4728 | 99% | 200.4 µg/mL | +/- 9.0294 |
| 10 | Pyrene | 129-00-0 | BCCK2592 | 99% | 200.0 µg/mL | +/- 9.0114 |
| 11 | Benz(a)anthracene | 56-55-3 | I60012022BAA | 99% | 200.0 µg/mL | +/- 9.0114 |
| 12 | Chrysene | 218-01-9 | RP240627ECS | 99% | 200.4 µg/mL | +/- 9.0294 |
| 13 | Benzo(b)fluoranthene | 205-99-2 | 052013B | 99% | 201.2 µg/mL | +/- 9.0655 |
| 14 | Benzo(k)fluoranthene | 207-08-9 | 012022K | 99% | 201.6 µg/mL | +/- 9.0835 |
| 15 | Benzo(a)pyrene | 50-32-8 | NQLXA | 98% | 199.9 µg/mL | +/- 9.0078 |
| 16 | Indeno(1,2,3-cd)pyrene | 193-39-5 | 12-JKL-118-9 | 97% | 199.0 µg/mL | +/- 8.9683 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 17 | Dibenz(a,h)anthracene | 53-70-3 | 2-ASA-59-1 | 99% | 200.0 | µg/mL | +/- 9.0114 |
| 18 | Benzo(g,h,i)perylene | 191-24-2 | RP240625RSR | 97% | 199.0 | µg/mL | +/- 8.9683 |

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

**Solvent:** Acetone/Toluene (50:50)
**CAS #** 67-64-1/108-88-3
**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:**
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)

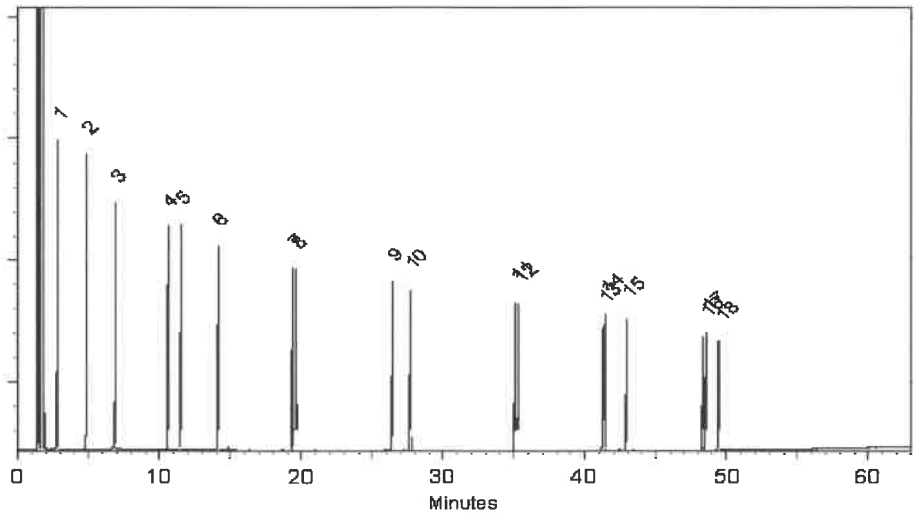
**Inj. Temp:**
250°C

**Det. Temp:**
330°C

**Det. Type:**
FID

**Split Vent:**
20 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.

Rebecca Gingerich - Operations Tech II

**Date Mixed:** 14-Oct-2024 **Balance Serial #** 1128360905

Brittany Federinko - Operations Tech I

**Date Passed:** 21-Oct-2024

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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

### Certified Uncertainty Value Notes:

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  $k$ 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.
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CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

*chromatographic plus*

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

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

**Catalog No. :** 30543 **Lot No.:** A0217838

**Description :** NJEPH Aromatics Matrix Spike Mix

NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

P13835 & P13860 Y.P. 12/09/24

**Container Size :** 5 mL **Pkg Amt:** > 5 mL

**Expiration Date :** September 30, 2030 **Storage:** 10°C or colder

**Handling:** Sonication required. Mix is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | 1,2,3-Trimethylbenzene | 526-73-8 | 8776.10-38 | 99% | 201.6 µg/mL | +/- 9.0835 |
| 2 | Naphthalene | 91-20-3 | STBL1057 | 99% | 200.0 µg/mL | +/- 9.0114 |
| 3 | 2-Methylnaphthalene | 91-57-6 | STBL3028 | 99% | 200.4 µg/mL | +/- 9.0294 |
| 4 | Acenaphthylene | 208-96-8 | 214935V18H | 95% | 199.1 µg/mL | +/- 8.9717 |
| 5 | Acenaphthene | 83-32-9 | MKCR7169 | 99% | 200.4 µg/mL | +/- 9.0294 |
| 6 | Fluorene | 86-73-7 | 10246250 | 98% | 201.5 µg/mL | +/- 9.0784 |
| 7 | Phenanthrene | 85-01-8 | MKCT3391 | 99% | 201.2 µg/mL | +/- 9.0655 |
| 8 | Anthracene | 120-12-7 | 101492T18R | 99% | 200.0 µg/mL | +/- 9.0114 |
| 9 | Fluoranthene | 206-44-0 | MKCQ4728 | 99% | 200.4 µg/mL | +/- 9.0294 |
| 10 | Pyrene | 129-00-0 | BCCK2592 | 99% | 200.0 µg/mL | +/- 9.0114 |
| 11 | Benz(a)anthracene | 56-55-3 | I60012022BAA | 99% | 200.0 µg/mL | +/- 9.0114 |
| 12 | Chrysene | 218-01-9 | RP240627ECS | 99% | 200.4 µg/mL | +/- 9.0294 |
| 13 | Benzo(b)fluoranthene | 205-99-2 | 052013B | 99% | 201.2 µg/mL | +/- 9.0655 |
| 14 | Benzo(k)fluoranthene | 207-08-9 | 012022K | 99% | 201.6 µg/mL | +/- 9.0835 |
| 15 | Benzo(a)pyrene | 50-32-8 | NQLXA | 98% | 199.9 µg/mL | +/- 9.0078 |
| 16 | Indeno(1,2,3-cd)pyrene | 193-39-5 | 12-JKL-118-9 | 97% | 199.0 µg/mL | +/- 8.9683 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 17 | Dibenz(a,h)anthracene | 53-70-3 | 2-ASA-59-1 | 99% | 200.0 | µg/mL | +/- 9.0114 |
| 18 | Benzo(g,h,i)perylene | 191-24-2 | RP240625RSR | 97% | 199.0 | µg/mL | +/- 8.9683 |

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

**Solvent:** Acetone/Toluene (50:50)
**CAS #** 67-64-1/108-88-3
**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:**
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)

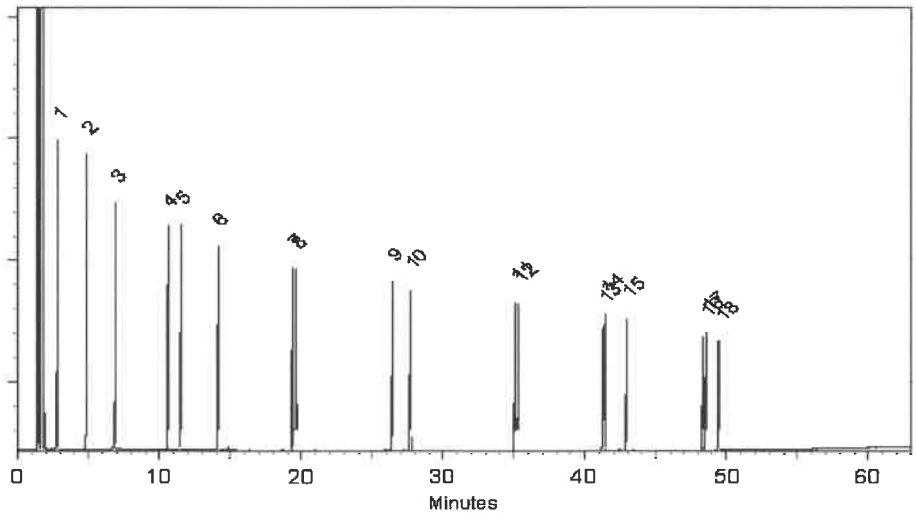
**Inj. Temp:**
250°C

**Det. Temp:**
330°C

**Det. Type:**
FID

**Split Vent:**
20 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.

Rebecca Gingerich - Operations Tech II

**Date Mixed:** 14-Oct-2024 **Balance Serial #** 1128360905

Brittany Federinko - Operations Tech I

**Date Passed:** 21-Oct-2024

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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

### Certified Uncertainty Value Notes:

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

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

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

### Manufacturing Notes:

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

### Handling Notes:

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

# Certificate of Analysis

***chromatographic plus***

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**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. :** 30543 **Lot No.:** A0217838

**Description :** NJEPH Aromatics Matrix Spike Mix

NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

P13835 & P13860 Y.P. 12/09/24

**Container Size :** 5 mL **Pkg Amt:** > 5 mL

**Expiration Date :** September 30, 2030 **Storage:** 10°C or colder

**Handling:** Sonication required. Mix is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | 1,2,3-Trimethylbenzene | 526-73-8 | 8776.10-38 | 99% | 201.6 µg/mL | +/- 9.0835 |
| 2 | Naphthalene | 91-20-3 | STBL1057 | 99% | 200.0 µg/mL | +/- 9.0114 |
| 3 | 2-Methylnaphthalene | 91-57-6 | STBL3028 | 99% | 200.4 µg/mL | +/- 9.0294 |
| 4 | Acenaphthylene | 208-96-8 | 214935V18H | 95% | 199.1 µg/mL | +/- 8.9717 |
| 5 | Acenaphthene | 83-32-9 | MKCR7169 | 99% | 200.4 µg/mL | +/- 9.0294 |
| 6 | Fluorene | 86-73-7 | 10246250 | 98% | 201.5 µg/mL | +/- 9.0784 |
| 7 | Phenanthrene | 85-01-8 | MKCT3391 | 99% | 201.2 µg/mL | +/- 9.0655 |
| 8 | Anthracene | 120-12-7 | 101492T18R | 99% | 200.0 µg/mL | +/- 9.0114 |
| 9 | Fluoranthene | 206-44-0 | MKCQ4728 | 99% | 200.4 µg/mL | +/- 9.0294 |
| 10 | Pyrene | 129-00-0 | BCCK2592 | 99% | 200.0 µg/mL | +/- 9.0114 |
| 11 | Benz(a)anthracene | 56-55-3 | I60012022BAA | 99% | 200.0 µg/mL | +/- 9.0114 |
| 12 | Chrysene | 218-01-9 | RP240627ECS | 99% | 200.4 µg/mL | +/- 9.0294 |
| 13 | Benzo(b)fluoranthene | 205-99-2 | 052013B | 99% | 201.2 µg/mL | +/- 9.0655 |
| 14 | Benzo(k)fluoranthene | 207-08-9 | 012022K | 99% | 201.6 µg/mL | +/- 9.0835 |
| 15 | Benzo(a)pyrene | 50-32-8 | NQLXA | 98% | 199.9 µg/mL | +/- 9.0078 |
| 16 | Indeno(1,2,3-cd)pyrene | 193-39-5 | 12-JKL-118-9 | 97% | 199.0 µg/mL | +/- 8.9683 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 17 | Dibenz(a,h)anthracene | 53-70-3 | 2-ASA-59-1 | 99% | 200.0 | µg/mL | +/- 9.0114 |
| 18 | Benzo(g,h,i)perylene | 191-24-2 | RP240625RSR | 97% | 199.0 | µg/mL | +/- 8.9683 |

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

**Solvent:** Acetone/Toluene (50:50)
**CAS #** 67-64-1/108-88-3
**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:**
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)

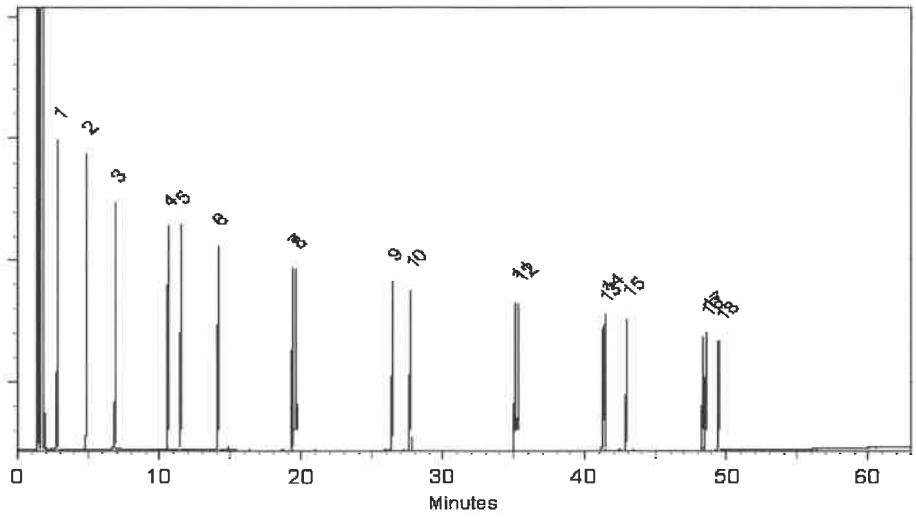
**Inj. Temp:**
250°C

**Det. Temp:**
330°C

**Det. Type:**
FID

**Split Vent:**
20 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.

Rebecca Gingerich - Operations Tech II

**Date Mixed:** 14-Oct-2024 **Balance Serial #** 1128360905

Brittany Federinko - Operations Tech I

**Date Passed:** 21-Oct-2024

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

## General Certified Reference Material Notes

### Expiration Notes:

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CERTIFIED REFERENCE MATERIAL

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**Catalog No. :** 30543 **Lot No.:** A0217838

**Description :** NJEPH Aromatics Matrix Spike Mix

NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

P13835 & P13860 } Y.P. 12/09/24

**Container Size :** 5 mL **Pkg Amt:** > 5 mL

**Expiration Date :** September 30, 2030 **Storage:** 10°C or colder

**Handling:** Sonication required. Mix is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | 1,2,3-Trimethylbenzene | 526-73-8 | 8776.10-38 | 99% | 201.6 µg/mL | +/- 9.0835 |
| 2 | Naphthalene | 91-20-3 | STBL1057 | 99% | 200.0 µg/mL | +/- 9.0114 |
| 3 | 2-Methylnaphthalene | 91-57-6 | STBL3028 | 99% | 200.4 µg/mL | +/- 9.0294 |
| 4 | Acenaphthylene | 208-96-8 | 214935V18H | 95% | 199.1 µg/mL | +/- 8.9717 |
| 5 | Acenaphthene | 83-32-9 | MKCR7169 | 99% | 200.4 µg/mL | +/- 9.0294 |
| 6 | Fluorene | 86-73-7 | 10246250 | 98% | 201.5 µg/mL | +/- 9.0784 |
| 7 | Phenanthrene | 85-01-8 | MKCT3391 | 99% | 201.2 µg/mL | +/- 9.0655 |
| 8 | Anthracene | 120-12-7 | 101492T18R | 99% | 200.0 µg/mL | +/- 9.0114 |
| 9 | Fluoranthene | 206-44-0 | MKCQ4728 | 99% | 200.4 µg/mL | +/- 9.0294 |
| 10 | Pyrene | 129-00-0 | BCCK2592 | 99% | 200.0 µg/mL | +/- 9.0114 |
| 11 | Benz(a)anthracene | 56-55-3 | I60012022BAA | 99% | 200.0 µg/mL | +/- 9.0114 |
| 12 | Chrysene | 218-01-9 | RP240627ECS | 99% | 200.4 µg/mL | +/- 9.0294 |
| 13 | Benzo(b)fluoranthene | 205-99-2 | 052013B | 99% | 201.2 µg/mL | +/- 9.0655 |
| 14 | Benzo(k)fluoranthene | 207-08-9 | 012022K | 99% | 201.6 µg/mL | +/- 9.0835 |
| 15 | Benzo(a)pyrene | 50-32-8 | NQLXA | 98% | 199.9 µg/mL | +/- 9.0078 |
| 16 | Indeno(1,2,3-cd)pyrene | 193-39-5 | 12-JKL-118-9 | 97% | 199.0 µg/mL | +/- 8.9683 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 17 | Dibenz(a,h)anthracene | 53-70-3 | 2-ASA-59-1 | 99% | 200.0 | µg/mL | +/- 9.0114 |
| 18 | Benzo(g,h,i)perylene | 191-24-2 | RP240625RSR | 97% | 199.0 | µg/mL | +/- 8.9683 |

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

**Solvent:** Acetone/Toluene (50:50)
**CAS #** 67-64-1/108-88-3
**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:**
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)

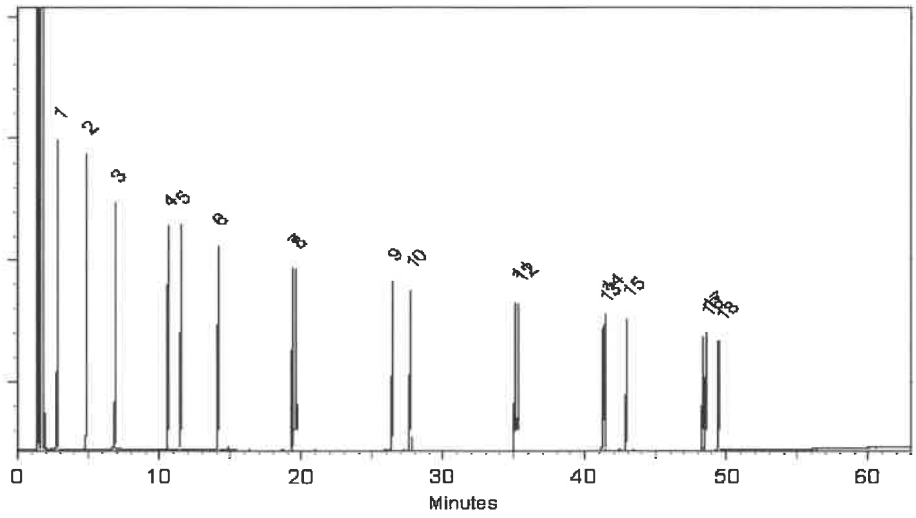
**Inj. Temp:**
250°C

**Det. Temp:**
330°C

**Det. Type:**
FID

**Split Vent:**
20 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.

Rebecca Gingerich - Operations Tech II

**Date Mixed:** 14-Oct-2024 **Balance Serial #** 1128360905

Brittany Federinko - Operations Tech I

**Date Passed:** 21-Oct-2024

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

# General Certified Reference Material Notes

## Expiration Notes:

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

## Purity Notes:

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

## Certified Uncertainty Value Notes:

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

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

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

## Manufacturing Notes:

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

## Handling Notes:

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

n-Hexane 95%
ULTRA RESI-ANALYZED
For Organic Residue Analysis

avantor™ | J.T.Baker®

W3153
TB
Opyte 11/25/2024
TB

# Certificate of Analysis

Material No.: 9262-03
Batch No.: 24G1962003
Manufactured Date: 2024-05-23
Expiration Date: 2025-08-22
Revision No.: 0

| Test | Specification | Result |
|---|---|---|
| FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL) | ≤ 5 | 3 |
| ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL) | ≤ 10 | 1 |
| ECD-Sensitive Impurities (as Ethylene Dibromide) – Single Impurity Peak (ng/mL) | ≤ 5 | 1 |
| Assay (Total Saturated $C_6$ Isomers) (by GC, corrected for water) | ≥ 99.5 % | 99.7 % |
| Assay (as n-Hexane) (by GC, corrected for water) | ≥ 95 % | 98 % |
| Color (APHA) | ≤ 10 | 5 |
| Residue after Evaporation | ≤ 1.0 ppm | 0.1 ppm |
| Substances Darkened by $H_2SO_4$ | Passes Test | Passes Test |
| Water (by KF, coulometric) | ≤ 0.05 % | < 0.01 % |

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

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

JCroak
Jamie Croak
Director Quality Operations, Bioscience Production

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

n-Hexane 95%
ULTRA RESI-ANALYZED
For Organic Residue Analysis

avantor™ | J.T.Baker®

W3147

W3147 update. 02/03/2025 JP

Material No.: 9262-03
Batch No.: 24G1962003
Manufactured Date: 2024-05-23
Expiration Date: 2025-08-22
Revision No.: 0

# Certificate of Analysis

| Test | Specification | Result |
|---|---|---|
| FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL) | ≤ 5 | 3 |
| ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL) | ≤ 10 | 1 |
| ECD-Sensitive Impurities (as Ethylene Dibromide) - Single Impurity Peak (ng/mL) | ≤ 5 | 1 |
| Assay (Total Saturated $C_6$ Isomers) (by GC, corrected for water) | ≥ 99.5 % | 99.7 % |
| Assay (as n-Hexane) (by GC, corrected for water) | ≥ 95 % | 98 % |
| Color (APHA) | ≤ 10 | 5 |
| Residue after Evaporation | ≤ 1.0 ppm | 0.1 ppm |
| Substances Darkened by $H_2SO_4$ | Passes Test | Passes Test |
| Water (by KF, coulometric) | ≤ 0.05 % | < 0.01 % |

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

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

JCroak

Jamie Croak
Director Quality Operations, Bioscience Production

# SHIPPING DOCUMENTS

Q1421

**USEPA**

DateShipped: 2/24/2025

CarrierName:

AirbillNo:

**CHAIN OF CUSTODY RECORD**

Site #: 51835

Contact Name Josh Frizzell

(470) 277-4600

**No: 2-022425-130044-0031**

RFP# NA

Lab: Alliance Technical Group, LLC - Non CLP

Lab Phone: 908-728-3144

| Lab # | Sample # | Location | Analyses | Matrix | Sample Date | Sample Time | Numb Cont | Container | Preservative | Lab QC |
|---|---|---|---|---|---|---|---|---|---|---|
| | P001-Clay-CF01-01 | HL_Pile | TAL VOCs | Soil | 2/24/2025 | 09:40 | 9 | 5 gram Encore | 4 C | Y |
| | P001-Clay-CF01-01 | HL_Pile | Percent Moisture | Soil | 2/24/2025 | 09:40 | 1 | 4 oz glass w/ septum | 4 C | Y |
| | P001-Clay-CF01-01 | HL_Pile | TAL SVOC+Pest+PCB | Soil | 2/24/2025 | 09:40 | 4 | 8 oz glass | 4 C | Y |
| | P001-Clay-CF01-01 | HL_Pile | TAL Metals+Hg+CN | Soil | 2/24/2025 | 09:40 | 4 | 8 oz glass | 4 C | Y |
| | P001-Clay-CF01-01 | HL_Pile | EPH | Soil | 2/24/2025 | 09:40 | 2 | 4 oz glass | 4 C | Y |
| | P001-Clay-CF01-01 | HL_Pile | SPLP VOCs | Soil | 2/24/2025 | 09:40 | 8 | 40 mL Amber Vial W/ Septum | 4 C | Y |
| | P001-Clay-CF01-01 | HL_Pile | SPLP SVOCs + Pesticides+PCBs | Soil | 2/24/2025 | 09:40 | 4 | 8 oz glass | 4 C | Y |
| | P001-Clay-CF01-01 | HL_Pile | SPLP Metals + Hg&CN | Soil | 2/24/2025 | 09:40 | 4 | 8 oz glass | 4 C | Y |
| | P001-Clay-CF01-01 | HL_Pile | SPLP EPH | Soil | 2/24/2025 | 09:40 | 4 | 8 oz glass | 4 C | Y |

Special Instructions: Please email results to S.Sumbaly@WestonSolutions.com and Josh.Frizzell@WestonSolutions.com. TAT 7 days.

**SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #**

| Items/Reason | Relinquished by (Signature and Organization) | Date/Time | Received by (Signature and Organization) | Date/Time | Sample Condition Upon Receipt |
|---|---|---|---|---|---|
| All SAMPLES All ANALYSES | WESTON SOLUTIONS | 2/24/25 1900 | | 2-24-25 1425 | 4.9°C IR Gun #1 Temp Blk present custody seals intact |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Q1421



**USEPA**
DateShipped: 2/24/2025
CarrierName:
AirbillNo:

**CHAIN OF CUSTODY RECORD**
Site #: 51835
Contact Name Josh Frizzell
(470) 277-4600

**No: 2-022425-130044-0031**
RFP# NA
Lab: Alliance Technical Group, LLC - Non CLP
Lab Phone: 908-728-3144

| Lab # | Sample # | Location | Analyses | Matrix | Sample Date | Sample Time | Numb Cont | Container | Preservative | Lab QC |
|---|---|---|---|---|---|---|---|---|---|---|
| | P001-Clay-CF01-02 | HL_Pile | TAL VOCs | Soil | 2/24/2025 | 09:50 | 3 | 5 gram Encore | 4 C | N |
| | P001-Clay-CF01-02 | HL_Pile | Percent Moisture | Soil | 2/24/2025 | 09:50 | 1 | 4 oz glass w/ septum | 4 C | N |
| | P001-Clay-CF01-02 | HL_Pile | TAL SVOC+Pest+PCB | Soil | 2/24/2025 | 09:50 | 2 | 8 oz glass | 4 C | N |
| | P001-Clay-CF01-02 | HL_Pile | TAL Metals+Hg+CN | Soil | 2/24/2025 | 09:50 | 2 | 8 oz glass | 4 C | N |
| | P001-Clay-CF01-02 | HL_Pile | EPH | Soil | 2/24/2025 | 09:50 | 1 | 4 oz glass | 4 C | N |
| | P001-Clay-CF01-02 | HL_Pile | SPLP VOCs | Soil | 2/24/2025 | 09:50 | 4 | 40 mL Amber Vial W/ Septum | 4 C | N |
| | P001-Clay-CF01-02 | HL_Pile | SPLP SVOCs + Pesticides+PCBs | Soil | 2/24/2025 | 09:50 | 2 | 8 oz glass | 4 C | N |
| | P001-Clay-CF01-02 | HL_Pile | SPLP Metals + Hg&CN | Soil | 2/24/2025 | 09:50 | 2 | 8 oz glass | 4 C | N |
| | P001-Clay-CF01-02 | HL_Pile | SPLP EPH | Soil | 2/24/2025 | 09:50 | 2 | 8 oz glass | 4 C | N |

Special Instructions: Please email results to S.Sumbaly@WestonSolutions.com and Josh.Frizzell@WestonSolutions.com. TAT 7 days.

**SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #**

| Items/Reason | Relinquished by (Signature and Organization) | Date/Time | Received by (Signature and Organization) | Date/Time | Sample Condition Upon Receipt |
|---|---|---|---|---|---|
| ALL SAMPLES ALL ANALYSES | WESTON SOLUTIONS | 2/24/25 1500 | | 2-24-25 1425 | 4.9°C Jul Ice #1 Temp blk. present custody seals intact |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Q1421



**USEPA**

DateShipped: 2/24/2025

CarrierName:

AirbillNo:

**CHAIN OF CUSTODY RECORD**

Site #: 51835

Contact Name Josh Frizzell

(470) 277-4600

**No: 2-022425-130044-0031**

RFP# NA

Lab: Alliance Technical Group, LLC - Non CLP

Lab Phone: 908-728-3144

| Lab # | Sample # | Location | Analyses | Matrix | Sample Date | Sample Time | Numb Cont | Container | Preservative | Lab QC |
|---|---|---|---|---|---|---|---|---|---|---|
| | P001-Clay-CF02-01 | HL_Pile | TAL VOCs | Soil | 2/24/2025 | 10:00 | 3 | 5 gram Encore | 4 C | N |
| | P001-Clay-CF02-01 | HL_Pile | Percent Moisture | Soil | 2/24/2025 | 10:00 | 1 | 4 oz glass w/ septum | 4 C | N |
| | P001-Clay-CF02-01 | HL_Pile | TAL SVOC+Pest+PCB | Soil | 2/24/2025 | 10:00 | 2 | 8 oz glass | 4 C | N |
| | P001-Clay-CF02-01 | HL_Pile | TAL Metals+Hg+CN | Soil | 2/24/2025 | 10:00 | 2 | 8 oz glass | 4 C | N |
| | P001-Clay-CF02-01 | HL_Pile | EPH | Soil | 2/24/2025 | 10:00 | 1 | 4 oz glass | 4 C | N |
| | P001-Clay-CF02-01 | HL_Pile | SPLP VOCs | Soil | 2/24/2025 | 10:00 | 4 | 40 mL Amber Vial W/ Septum | 4 C | N |
| | P001-Clay-CF02-01 | HL_Pile | SPLP SVOCs + Pesticides+PCBs | Soil | 2/24/2025 | 10:00 | 2 | 8 oz glass | 4 C | N |
| | P001-Clay-CF02-01 | HL_Pile | SPLP Metals + Hg&CN | Soil | 2/24/2025 | 10:00 | 2 | 8 oz glass | 4 C | N |
| | P001-Clay-CF02-01 | HL_Pile | SPLP EPH | Soil | 2/24/2025 | 10:00 | 2 | 8 oz glass | 4 C | N |
| | | | | | | | | | | |

Special Instructions: Please email results to S.Sumbaly@WestonSolutions.com and Josh.Frizzell@WestonSolutions.com. TAT 7 days.

**SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #**

| Items/Reason | Relinquished by (Signature and Organization) | Date/Time | Received by (Signature and Organization) | Date/Time | Sample Condition Upon Receipt |
|---|---|---|---|---|---|
| ALL SAMPLES ALL ANALYSES | WESTON SAMPLERS | 2/24/25 1500 | | 2-24-25 1425 | 4.9°C IR Gun #1 Temp blk. present custody seals intact |
| | | | | | |
| | | | | | |
| | | | | | |

**From:** Sumbaly, Smita <S.Sumbaly@WestonSolutions.com>
**Sent:** Tuesday, February 25, 2025 9:30 AM
**To:** Jordan@chemtech.net
**Cc:** yazmeen.gomez@alliancetg.com
**Subject:** RE: Site # 51835
**Attachments:** RFP#905-corrected COC.pdf

Jordan – Attached please find corrected COC with RFP# 905 and use the SW 846 Methods. Contact me with any questions.

Thanks,
Smita

**From:** Jordan Hedvat <Jordan@chemtech.net>
**Sent:** Monday, February 24, 2025 5:32 PM
**To:** Sumbaly, Smita <S.Sumbaly@WestonSolutions.com>
**Cc:** yazmeen.gomez@alliancetg.com
**Subject:** RE: Site # 51835

***** External Message *** -- PROBE message before clicking links or opening attachments.**

Thanks, the COC did not mention specific Methods so we are running by standard SW-846. If CLP Methods required for these samples received today please let us know. COC is attached (# Q1421)

Regards,
Jordan

**Jordan Hedvat**
**Account Executive, Environmental Laboratories**
**Main:** 908-789-8900
**Direct:** 908-728-3144
**Address:** 284 Sheffield St, Ste 1, Mountainside, NJ 07092
**www.alliancetg.com**

**From:** Sumbaly, Smita [mailto:S.Sumbaly@WestonSolutions.com]
**Sent:** Monday, February 24, 2025 5:28 PM
**To:** Jordan@chemtech.net
**Subject:** Re: Site # 51835

Rfp#905

Sent from my iPhone

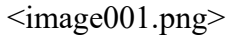
On Feb 24, 2025, at 4:36 PM, Jordan Hedvat <Jordan@chemtech.net> wrote:

*** External Message *** -- PROBE message before clicking links or opening attachments.

Good afternoon Smita,

We received project with COC titled “Site # 51835.” Please confirm for which RFP # project this falls under so we may include the correct pricing provided at the time of bid? Thank you

Regards,
Jordan



**Jordan Hedvat**
**Account Executive, Environmental Laboratories**
**Main:** 908-789-8900
**Direct:** 908-728-3144
**Address:** 284 Sheffield St, Ste 1, Mountainside, NJ 07092
www.alliancetg.com

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

# Laboratory Certification

| Certified By | License No. |
|---|---|
| | |
| CAS EPA CLP Contract | 68HERH20D0011 |
| | |
| Connecticut | PH-0830 |
| | |
| DOD ELAP (ANAB) | L2219 |
| | |
| Maine | 2024021 |
| | |
| Maryland | 296 |
| | |
| New Hampshire | 255424 Rev 1 |
| | |
| New Jersey | 20012 |
| | |
| New York | 11376 |
| | |
| Pennsylvania | 68-00548 |
| | |
| Soil Permit | 525-24-234-08441 |
| | |
| Texas | T104704488 |

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

# LOGIN REPORT/SAMPLE TRANSFER

**Order ID :** Q1421 ROYF02
**Client Name :** Weston Solutions, Inc.
**Client Contact :** Smita Sumbaly
**Invoice Name :** Weston Solutions, Inc.
**Invoice Contact :** Smita Sumbaly

**Order Date :** 2/24/2025 2:56:42 PM
**Project Name :** ~~51835~~ RFP 905
**Receive DateTime :** 2/24/2025 2:25:00 PM
**Purchase Order :**

**Project Mgr :**
**Report Type :** Level 4
**EDD Type :** EXCEL NOCLEANUP
**Hard Copy Date :**
**Date Signoff :**

| LAB ID | CLIENT ID | MATRIX | SAMPLE DATE | SAMPLE TIME | TEST | TEST GROUP | METHOD | FAX DATE | DUE DATES |
|---|---|---|---|---|---|---|---|---|---|
| Q1421-01 | P001-CLAY-CF01-01 | Solid | 02/24/2025 | 09:40 | | | | | |
| | | | | | VOC-TCLVOA-10 | | 8260D | | 10 Bus. Days |
| Q1421-02 | Q1421-01MS | Solid | 02/24/2025 | 09:40 | | | | | |
| | | | | | VOC-TCLVOA-10 | | 8260D | | 10 Bus. Days |
| Q1421-03 | Q1421-01MSD | Solid | 02/24/2025 | 09:40 | | | | | |
| | | | | | VOC-TCLVOA-10 | | 8260D | | 10 Bus. Days |
| Q1421-07 | P001-CLAY-CF01-02 | Solid | 02/24/2025 | 09:50 | | | | | |
| | | | | | VOC-TCLVOA-10 | | 8260D | | 10 Bus. Days |
| Q1421-09 | P001-CLAY-CF02-01 | Solid | 02/24/2025 | 10:00 | | | | | |
| | | | | | VOC-TCLVOA-10 | | 8260D | | 10 Bus. Days |

**Relinguished By :** CR
**Date / Time :** 2-24-25 15:40

**Received By :**
**Date / Time :** 2-24-25 15:40

**Storage Area :** VOA Refridgerator Room